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ON

DISEASES OF THE SKIN;

THEIR

HISTORY, PATHOLOGY, AND TREATMENT.

Delivered in the Middlesex Hospital, during the Summer Session, 1842, *by*

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LECTURE XXIV.

ECZEMA—HUMID TETTER OR SCALL.

ECZEMA is a term derived from the Greek verb ἐκζειν, to boil out, and was probably intended by the older physicians to convey the idea of a bubbling out of the peccant humours of the system. It is a disorder which is characterised by the appearance of very small vesicles on the skin, the vesicles being sometimes so minute as to require the aid of a magnifying-glass in order to distinguish them. The vesicles present considerable variety in their mode of distribution, being sometimes single and disseminated, sometimes aggregated into clusters, and sometimes confluent, so as to form a compound vesicle of considerable extent, but possessing very little elevation above the surface. The degree of congestion of the skin by which they are accompanied is also very various, being sometimes so trifling as scarcely to attract attention, and at other times constituting the prominent feature of the disease. The course of the vesicles pursues the ordinary type of effusive disease; the effused fluid is primarily colourless and transparent, and in the milder degrees of inflammatory excitement undergoes no alteration of that character, but dries up into small, thin, circular, brownish-yellow scabs, which are thrown off by desquamation. When the inflammatory excitement is more intense, the fluid becomes opake and semi-purulent, or a false membrane is deposited on the floor of the vesicle, or both of these states occur. In this more severe form of the disease, the vesicles burst, and the dispersed secretion, with that which continues to be poured out by the inflamed surface, constitutes a crust of greater or less extent and thickness. Sometimes this crust is of considerable extent, as upon the face, from the rapidity of desiccation, and the greater activity of the disorder in this situation; or upon the scalp, where the secretions collecting about the hairs form a crust of large size and considerable thickness. The duration of eczema is determined by the cause which excites it, as also by its occurrence at one or successive eruptions. The form of the vesicle is usually semi-globular, but sometimes, on the contrary, it is prominent and conical.

The varieties of eczema are referrible to the two degrees of inflammation, acute and chronic; but besides this arrangement it will be important that I should follow the example of other dermo-pathologists, in pointing out certain local forms which, either from the nature of the seat or functions of the part, present peculiarities of their own. These latter will form a third and local group; the degree of severity of the inflammation accompanying these determining their correspondence either with the acute or chronic form of the disease. In a tabular form the varieties would stand thus:—

Acute.

Eczema simplex,
„ rubrum,
„ mercuriale,
„ impetiginodes.

Chronic.

Eczema chronicum.

Local Forms.

Eczema capitis,
„ faciei,
„ auriculare,
„ mamillare,
„ umbilicale,
„ perineale.

ECZEMA SIMPLEX.

Eczema simplex comprehends that form of eruption which is unattended with any severe degree of inflammatory congestion of the dermis, and the term is applied in contradistinction to the inflamed variety, eczema

rubrum. The vesicles in eczema simplex are usually of the size of the head of a small pin; they are very numerous, more or less clustered, and they terminate, when undisturbed, in thin brownish scabs. The eruption is not usually attended with constitutional symptoms. The local symptoms are itching and a feeling of irritation of the part which urges the necessity for scratching. By scratching, the vesicles are broken, and the scab which succeeds is harder and more adherent than that which follows the undisturbed vesicle. Eczema simplex may occur on any part of the body, but is most frequently met with in regions where the epidermis is thin, as upon the forearm, the flexures of the elbows and wrists, between the fingers, and upon the lower extremities in the flexures of the joints. In duration the eruption and its consequences may be prolonged for two or three weeks.

The common character of eczema simplex is, as I have just explained, to break out in clusters of small extent on those regions of the body where the skin is most delicate and irritable. But besides this, there are two other forms of the eruption, one in which the patch with its vesicles assumes the appearance of a small ring, and in that respect bears analogy to the circinnate varieties of cutaneous disease; and another in which the vesicles are sparely distributed, and occupy the thin skin of the angles of the fingers, and the flexures of the wrists and of the elbows. The latter form is remarkable for its close resemblance to scabies, and in truth serves to furnish many of the cases of scabies of which we hear. There is the same redness as in scabies, and the same shape and size of vesicle, for as the vesicles of scabies lose their conical form on other parts of the body, those of eczema obtain it when they occur between the fingers; moreover, the itching is very troublesome, and the epidermis is often broken by scratching. But with all these points of resemblance there is one of dissimilitude,—the pathognomonic character of scabies,—namely, the presence of the *acarus scabiei*. I have found this latter form of eczema very puzzling in practice, and to involve very important considerations, particularly when it occurs in the families of the upper classes of society.

ECZEMA RUBRUM.

Inflammatory eczema differs from eczema simplex in the occurrence of the eruption on a highly inflamed portion of the skin. The inflamed surface is vividly red, and glistens from distention and tumefaction. On this inflamed and tumefied surface the vesicles are developed, commencing in the form of numerously sprinkled white points, and quickly increasing and becoming filled with serous fluid. Sometimes the vesicles rise from the surface, each surrounded by an inflamed areola, and the concurrence of these areolæ constitutes the inflamed patch; and very frequently this character of the eruption is met with in association with the preceding. The fluid of the vesicles, which is at first transparent, becomes opake and turbid, and in severe or prolonged cases puriform. As respects the termination of the eruption there is some variety; in milder cases the fluid of the vesicles is absorbed, and the inflammation of the skin gradually subsides. In more severe cases the vesicles burst, or are ruptured by violence, and expose the inflamed dermis, which is of a vivid scarlet hue, and pours out a quantity of ichorous discharge. When the vesicles are confluent the abraded surface is often considerable, and the discharge by so much increased. The whole surface is then bathed in this ichorous fluid, the soddened epidermis is rendered thick and white by its presence, contrasting strongly with the deep redness of the naked dermis, and thin flakes of false membrane are to be met with here and there. At a later period, or when exposed to the atmosphere, the ichorous and purulent secretion desiccates into a thick yellow brown crust, which covers the entire surface. The crust, from its hardness, is a source of irritation to the inflamed part, and if allowed to remain becomes the cause of the continuance of the disease in a chronic form. The duration of eczema rubrum is variable; generally the disease subsides at the end of ten or fourteen days, but sometimes it continues for three or four weeks, and in unhealthy states of the constitution is liable to assume the characters of eczema chronicum. On the subsidence of the cutaneous inflammation the epidermis peels off in flakes of considerable size; this is particularly the case when the hands and fingers have been affected, for here the epidermis frequently carries with it the entire nail, or the nails of several of the fingers. Sometimes, during the exfoliation of the epidermis, the local disorder is re-excited, and at other times the desquamation continues for months, a consequence of the chronic congestion of the capillaries of the dermis.

You may, perhaps, form a better impression of the nature of the disease from the following truthful picture drawn by Dr. Marcet in a case published in the second volume of the "Medico-Chirurgical Transactions:"—"The attacks of the disease are generally preceded for a few hours by what he calls a twinging sensation at the pit of the stomach, but without nausea, fever, or even loss of appetite. He then begins to feel a sense of stiffness and heat in various parts of his body; these parts in a few hours are observed to become red, and to swell rapidly to a considerable degree. The hands, the feet, the ears, and the lips, are the parts which the disease principally attacks. But it also frequently appears in the face and eyes, and sometimes even in the hairy scalp.

Indeed, in the severest attacks there is no part of the body which can be said to be totally exempt from it. The extremities, however, especially the hands and feet, are by far the most conspicuous seats of the complaint.

"When the parts are attentively examined on the second or third day of the disease, the cuticle appears to be raised in innumerable small vesicles, some of which are distinct, so as to give a roughness to the surface, though most of them are confluent, forming an uniform swelling, with a shining appearance. Soon, however, on the swelling abating, which commonly happens on the third or fourth day, the cuticle begins to crack, and to rise in patches, discovering an inflamed surface with numerous small superficial ulcerations, from which there oozes a fluid having a strong disagreeable smell. On the extremities, and in the bend of the toes and finger joints, pretty deep fissures or ulcerations are formed, which, however, heal readily, and in a day or two the cuticle falls off in large patches, sometimes as large as the hand, presenting an appearance which may be best compared to that of the trunk of a palm-tree when casting its bark. Sometimes the nails themselves are cast off, the new nail gradually pushing up the old one, which appears dead and withered. A few days after this, however, the new cuticle, which is at first red and inflamed, gradually assumes its natural appearance, so that in the course of about a fortnight or three weeks from the beginning of the attack the complaint is commonly removed. But at other times, and at the moment when the patient thinks himself convalescent, the new cuticle becomes hard and dry, and cracks again, as in the first instance, producing a repetition of the symptoms just described."

ECZEMA MERCURIALE.

Mercurial eczema, the hydrargyria of Dr. Alley is an eczema rubrum, resulting from the use of mercury. The disease is of rare occurrence at the present day, but formerly, when the employment of mercury was carried to a greater extent, the disease would appear to have been more frequent. The eruption resembles, in every respect, the eczema rubrum, and presents degrees of severity, which Dr. Alley has treated as varieties under the names of hydrargyria mitis, febrilis, and maligna.

In hydrargyria mitis, the vesicles are sometimes so minute as to require the aid of a magnifying-glass in order to perceive them; the more conspicuous character, therefore, is the red efflorescence, and this form of the disease has consequently been described under the appellation erythema mercuriale. When the inflammation is more severe, the vesicles are fully formed and quite distinct, and their contents pass from the transparent into the turbid and puriform.

Eczema mercuriale is usually attended with symptoms of slight constitutional disorder, but when these rise to a state of fever, they constitute the hydrargyria febrilis of Dr. Alley. In this state the inflammation extends to the mucous membrane of the fauces, and sometimes to that of the bronchial tubes. There are rigors, with pains in the head, suppressed secretions, and excited circulation. In a still more advanced degree of the disorder, or rather, perhaps, in a condition of the system induced by a long course of mercury, by its continuance after the appearance of the eruption, or dependent upon idiosyncrasy, that state of things results which has received from Dr. Alley the name of hydrargyria maligna; the face is swollen from serous infiltration into its cellular tissue, the eyelids are closed, and the mucous membrane of the mouth and pharynx is tumid. The eruption also loses the bright redness of active congestion, and becomes dull and purplish.

The eruption of mercurial eczema is preceded by a sense of heat and pricking, and during its course itching and smarting supervene. It occurs chiefly on the trunk of the body, sometimes on the pudendal region, or upon the backs of the hands and arms, and occasionally upon the entire surface. When general, it presents some similitude to measles in the semilunar shape which the inflamed patches assume previously to their confluence. The rupture of the vesicles is not unfrequently followed by excoriation of the surface, and by the discharge of an acrid and irritating ichor. On the subsidence of the cutaneous inflammation the skin returns gradually and slowly to its original state, and the epidermis is thrown off by repeated desquamations.

Persons who have suffered an attack of eczema mercuriale are subject to a recurrence of the eruption from trivial causes. In a case mentioned by Dr. Moriarty it returned several times on the exhibition of opium, and in Dr. Crawford's case followed the exhibition of a single grain of that drug.

Under the name of erythema mercuriale several cases have been recorded which have no claim to be considered as of mercurial origin, and which are, in truth, instances of eczema rubrum proceeding from ordinary causes. Of this kind is the case described by Dr. Marcet, in the second volume of the "Medico-Chirurgical Transactions." The eruption in Dr. Marcet's case first appeared after an attack of gonorrhœa for which internal medicines were taken, but the patient was not salivated, and it continued to recur several times in the course of the year, during the greater part of the patient's life. In Dr. Rutter's case the first eruption of the disease occurred during the period of the patient's taking mercury, in consequence of exposure to cold; but it reappeared seven years afterwards, when he neither was nor

ad been taking medicine of any kind. Again, the disease has been referred to the influence of a single blue-pill; and Dr. Alley conceived that the disease was aggravated by the continuance of the patient in a mercurial atmosphere. While, on the other hand, Dr. Moriarty exhibited mercury for the cure of this eruption without producing any increased severity in the disease.

From these various statements, and from the facts before us, we may, I think, conclude that mercury must be added to the causes capable of producing eczema rubrum, the quantity of the medicine necessary for that effect being proportioned by the idiosyncrasy of the individual. But I would by no means pledge myself to the admission that the whole of the recorded cases of eczema mercuriale were of mercurial origin.

ECZEMA IMPETIGINODES.

Eczema impetiginodes, as its name implies, combines the characters of the vesicular disease, eczema, with the pustular affection, impetigo. The limpid fluid of the vesicles passes very quickly into the puriform state, and pustules are sometimes numerously scattered in the neighbourhood of the inflamed part. The local inflammation presents all the intensity of eczema rubrum, the skin is vividly red and shining, it is tumid and swollen and very sensitive. The vesicles in this disease are produced so abundantly, and are so closely clustered, that they frequently run together and form a multilocular vesicle, often of considerable extent. When the vesicles are broken the exposed dermis presents a vivid crimson hue, which is here and there covered by thin white layers of false membrane. The secretion from the abraded skin is very copious, frequently wetting through all the coverings that are applied to it. The secreted fluid is for the most part colourless or puriform, but sometimes is rendered pinkish by the intermixture of the colouring matter of the blood. When allowed to collect upon the inflamed surface the ichorous discharge desiccates into a thick, yellowish-brown, lamellated or spongy crust, blackened at intervals by admixture with blood. When left to itself the excoriated surface frequently heals beneath this crust, but at other times seems irritated by its presence.

The duration of eczema impetiginodes is from one to several weeks, the period being subject to variety from the manner of the eruption, either in single or successive attacks, or from the nature of the treatment adopted.

Eczema impetiginodes is a local affection, affecting usually a region of small extent, as the face, or the forearms and hands. It is unattended by constitutional symptoms, unless the irritation produced by it be considerable, in which case the ordinary feverish symptoms are induced. The eruption is very rarely general in its distribution.

ECZEMA CHRONICUM.

Any of the preceding forms of eczema may pass into a chronic state, and by producing a morbid alteration in the skin and subcutaneous tissues, last for months, and even for years. We sometimes see the disease for the first time in the chronic shape, and should have difficulty in recognising it, if our attention had not been specially directed to the possibility of such an occurrence. The skin is much thickened by the continuance of the inflammation, its tissues are dense and infiltrated, often cracked and chapped to a considerable extent, and an ichorous discharge in large quantities is poured forth from the chaps and excoriations. The desiccation of this secretion gives rise to the production of crusts, which are reproduced as often as they are broken or rubbed off.

There is scarcely a disease in the whole catalogue of cutaneous disorders that is more troublesome and obstinate than chronic eczema. Often, when the inflammatory congestion subsides, and we are led to hope that the disease itself will shortly disappear, reaction suddenly ensues, and a fresh crop of vesicles is produced, to go through a similar course with those which preceded them. While at other times no reaction takes place, the ichorous discharge ceases, but the disease advances no further towards cure, and puts on all the outward characters of chronic psoriasis, the epidermis covering its surface being thrown off by repeated desquamation in considerable flakes.

Chronic eczema is attended with itching, which often increases to a distressing degree, and is only augmented by scratching. In some situations, as on the pudendum, the scrotum, and around the anus, the itching is generally unbearable, and occurs in violent paroxysms.

Chronic eczema is most frequently met with in the flexures of the joints.

ECZEMA CAPITIS.

Eczema capitis is a form of eczema which is not unfrequently met with in children of a cachectic or strumous habit of body, or during the irritation which is kept up by dentition. It is common, also, in the poorly clad and poorly fed children who inhabit our workhouses. The disease exhibits itself with the usual characters of eczema rubrum; the scalp is red and swollen, the vesicles are produced in clusters and are soon broken, and the discharge which follows desiccates into yellowish-brown lamellated crusts, which sometimes cover the entire scalp and attain a very considerable thickness. When these crusts are removed the surface beneath looks red and inflamed, or presents a superficial ulceration. If the

most rigid cleanliness be neglected, pediculi collect in large numbers, and the discharge becomes unbearably offensive and disgusting. The general health of children suffering under this complaint not being much affected, it has been regarded by some authors as a prophylactic against severer disorders,—a convenient salve for an obstinate disease, and one which reminds us of the hypothesis of Linnæus that the parasites of the skin are useful to plethoric children and protect them from apoplexy by virtue of the excitation which they create.

Eczema capitis sometimes takes on the chronic form, and is then very difficult of restoration to a healthy state; the integument becomes thickened and infiltrated; chaps and fissures of considerable depth are formed; deep ulcerations occur, and subcutaneous abscesses are occasionally produced. With this state of the skin it is usual to find enlargement of the lymphatic glands of the neck, and the growth of the hair is interfered with and arrested. In the chronic state of the disorder the discharge is considerably diminished, sometimes it is entirely arrested, and the epidermis is thrown off in scales and flakes. This condition of the scalp constitutes one of the forms of disorder which Alibert has indicated under the name of *teigne furfuracée*. At other times the ichorous secretion continues, and collecting the hair into small bundles, produces an appearance which has been likened by Rayer to the sprouting feathers of young birds, each bundle of hairs being surrounded by a thin pellicle formed of dried ichor. To the poetical imagination of Alibert these fascicles of hairs, with their silvery pellicles, shone like fibres of asbestos, and the disease was named by him, *teigne amientacée*.

Chronic eczema is accompanied by much itching and irritation of the scalp, and the disease is often aggravated by the violent use of the nails. In the chronic form the disorder may last for many months or even years.

ECZEMA FACIEI.

Eczema of the face is often confounded with the *crusta lactea*, to which it bears considerable resemblance, and may, in truth, be regarded as a variety of that complaint. It is a disease not unfrequent in young children, and occupies a greater or less extent of the face. Sometimes it exists originally on the scalp and spreads to the face, but more commonly breaks out on the lips, the cheeks, the forehead, or chin. In appearance and progress the disease presents all the characters of eczema rubrum, and the ichorous fluid which it pours forth, from exposure to the atmosphere, desiccates very speedily into a lamellated crust of a yellowish-brown or greenish colour, and various thickness. The child's face is sometimes completely covered with such a crust, and then, unless we had seen the disease at its first eruption, or could observe eczematous vesicles in its circumference, we might regard it as the porrigo larvalis of Willan. This disorder produces a great deformity of the features of the child, for not only is the skin bespecked with unseemly scabs and blotches, but the whole integument is swollen, and the eyebrows and eyelashes are frequently destroyed. Sometimes, also, the inflammation extends to the conjunctiva or mucous membrane of the nose. Like other forms of eczema, the present is attended with much itching, and the disorder is aggravated by the scratching which ensues. Fissures of considerable depth are often produced in this way, and permanent scars remain behind after the cure of the disease.

If left entirely alone, the crusts fall off at the end of several weeks or months, and the skin desquamates and returns gradually to its natural state. At other times, and less frequently, it falls into a chronic state and lasts for many months.

ECZEMA AURIUM.

Eczema of the ears is also an eruption which is not uncommon in children, especially during the periods of dentition. It also affects adults, and is then very troublesome and annoying. When the integument is deeply affected the lymphatic glands of the neck are liable to enlargement, and subcutaneous abscesses frequently form. In the chronic state the cellular structure of the ear is infiltrated, and the meatus is constricted in its passage.

ECZEMA MAMILLARUM.

Eczema of the nipples is by no means frequent, the disorder which commonly attacks those parts in nurses being erythema. The eczematous disease occurs, for the most part, in girls at the period of puberty, in persons who have never been mothers, at the critical period of life, and in old women. The disease puts on all the characters which have been described as characterising eczema rubrum; it is exceedingly painful and annoying, and sometimes falls into a chronic state.

ECZEMA UMBILICALIS.

This is a disorder to which infants are occasionally liable; it is of little importance, and soon yields to simple treatment.

ECZEMA PERINEALIS.

When eczema attacks the pudendal region it is exceedingly troublesome and annoying. The itching is frequently intolerable, and the patient is hardly able to bear up under the continuance of the irritation which he endures. But severe as the disorder is in males, it is a thousand times aggravated in females, whose sufferings amount to agony.

In the latter sex the inflammation extends to the mucous membrane, occasioning incessant pruritus, and the efforts made to relieve the itching are followed by painful excoriations. In a chronic form, eczema is occasionally the cause of nymphomania.

SOMNAMBULISM FROM PARASITIC ANIMALS.

A YOUTH, fifteen years of age, and of a lymphatic temperament, had been apparently cured of incipient *tinea favosa*, when he became melancholy and somnambulic. Every night he rose from bed, uttered lamentations, and answered to the demands of nature in his room, retaining no consciousness of having done so, when awakened either in the morning or immediately after the occurrences of the night. In his somnambulism he was observed frequently to place his hands to his head; and ultimately some orifices about two lines in diameter were remarked on the right parietal region, which gave issue to a fetid purulent discharge, accompanied with troublesome itching. From these orifices some worms were at length seen to be discharged, which proved to be the larvæ of the common flesh-fly. About 180 of those worms were extracted, and the somnambulism, nervous fever, and skin disease, successively disappeared in consequence.—*Il Filiatre Sebezio.*

CNICIN, THE BITTER PRINCIPLE OF CENTAURY.

THIS substance is white, crystalline, inodorous, extremely bitter, leaving a nauseous taste in the mouth, almost insoluble in water, but very soluble in alcohol, either pure or diluted. It exerts no reaction on blue or red turnsol-paper, and combines neither with acids nor salifiable bases; but it is readily altered by the action of an acid or an alkali. In doses of from four to eight grains it causes a sensation of burning heat in the pharynx and œsophagus, followed by an uncomfortable sense of constriction, particularly in the latter organ. Heartburn ensues to a greater or less extent, and in some cases, vomiting, colic, and diarrhœa, have been produced, though these effects usually disappear in from two to three hours.

Cnicin augments the freedom of the circulation, and the heat of the surface, producing phenomena attending fever. It has, however, been found by M. Nonat, when employed against disease, to possess febrifuge properties similar to those of quinine, though less in degree. It often arrests febrile paroxysms, and has been sometimes successfully opposed to engorgements of the spleen. It is advantageously administered in union with sulphate of quinine, the doses of which may be proportionately lessened on the addition of cnicin.

CLINICAL LECTURES

ON CASES OF

DISEASES OF THE NERVOUS SYSTEM;

DELIVERED AT KING'S COLLEGE HOSPITAL

(*During the Summer Session*, 1843).

BY

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LECTURE II.

The Pathology and Treatment of Chorea.

IT cannot be doubted that the phenomena of chorea are referrible to disorder of the nervous system. The various grades and forms of that disease are not to be explained on any other hypothesis than that which supposes the nervous tissues to be those chiefly involved. The following questions suggest themselves in considering the pathology of chorea,—In what manner is the nervous system affected? What causes it to be thus attacked? What portion of it, in particular, is involved?

It is impossible to suppose the existence of the peculiar phenomena of chorea without admitting the simultaneous affection of a nervous centre, which shall be the immediate exciting cause of the peculiar movements that characterise the malady. We know from experiment that that peculiar disturbance of nutrition which is called *irritation*, may, when it affects a nervous centre, occasion unnatural movements in muscular parts which derive their nerves from that centre. And it is one of the characters of the state of simple *irritation* that so little does it disturb the arrangements of the constituent particles of the affected organ as to induce in it no pathological change, but simply to derange the physiological action, the molecular movements of its elements. Now this state of irritation may arise primarily and essentially in the part itself, owing to a perversion of its proper physiological action, or it may be communicated to it from some distant part of the body which is in intimate connection with it.

The natural history of chorea affords us sufficient grounds for the opinion that the irritation of the nervous centre upon which its phenomena depend, may be caused by some mental change acting upon the part, or may be the result of a peripheral irritation propagated to it through its nerves. Hence we may fairly adopt for chorea the same division as that proposed by Dr. Marshall Hall for epilepsy; namely, *centric*, when the nervous centre is primarily affected, *eccentric* when the affection of the nervous centre is secondary. For example, a strong mental emotion, acting upon the nervous centre, as in the girl Lowe, mentioned in the last lecture, whose chorea was brought on by a fright received in the street, will cause

centric chorea; and worms in the intestines may give rise to *eccentric* chorea, or pericardial irritation may cause similar phenomena. My belief is that the centric form is infinitely the more frequent of the two, and that in certain states of constitution, where the nutrition of the nervous system has been weakened and impaired, a slight mental disturbance, which may perhaps escape the patient's recollection, will be sufficient to occasion the irritation necessary to give rise to the phenomena.

That the change in the nervous centre upon which the symptoms of this disease depend amounts to no more than irritation, is proved by the absence of all authentic proof, from morbid anatomy, of any constant organic lesion in the fatal cases; and especially of any that can be considered adequate to the production of the peculiar movements. Cases of chorea are very rarely fatal, and the instances on record in which a fatal event did ensue, have not, by their anatomy, thrown any light upon the pathology of the disease. Again, the cessation of the phenomena, as in sleep, or during a period of recovery, and their recurrence under the influence of their usual exciting cause, show that there can be no permanent organic lesion.

What nervous centre is the seat of this irritation? The parts in which the irregular movements occur are supplied exclusively by cerebro-spinal nerves; and it is especially worthy of observation that the ordinary muscles of respiration are never affected in chorea. It is plain, then, from the fact last stated, that the medulla oblongata, the centre of respiratory movements, is not involved, otherwise respiration would not be so free from disturbance as it uniformly is. We must look, then, either to the brain or to the spinal cord (those terms being used in their ordinary anatomical sense), for an explanation of the phenomena.

I have already remarked that the movements which are so characteristic of this disease are quite of the emotional kind; and it has been well ascertained that fright or sudden emotion is the most frequent cause of the phenomena. Now this would lead me to assign, as the seat of irritation, that part of the brain which is more immediately connected with, and influenced by the emotions of the mind. To determine what that portion may be is a physiological problem of no ordinary difficulty or interest. It must evidently be a part which has a connection more or less direct with those parts of the body in which emotional excitement can be manifested, or can make itself be felt. No part answers to this description so perfectly as that to which anatomists have given the name of *mesocephale*, a sort of middle place or connecting bond between the medulla oblongata, the cerebrum, and the cerebellum. Here there is an abundant admixture of white fibres with grey matter, and from the large quantity of the latter kind of nervous substance which exists here, this part must be the seat of an active nutrition. Now, if this part be so readily influenced by emotion, it is most probably the seat of irritation in chorea.

We cannot explain the phenomena by the hypothesis which refers them to irritation of the spinal cord. The hemiplegic tendency, which we have noticed as so constant a feature, is utterly inexplicable according to that view. For diseases of the spinal cord affect the body symmetrically, and the sphincters would hardly escape if the irritation of the cord were at all extensive, yet they are rarely, if ever, engaged. The affection of one half the body would alone refer to some part above the decussation of the pyramids as the seat of irritation. Moreover, the obvious connection of the disease with affections of mind (fright, for instance,) in a large proportion of cases, and its tendency, when of long continuance, to produce a degeneration of the mental faculties, are not to be accounted for otherwise than by reference to the encephalon itself. In fine, an organic or functional affection of the spinal cord is likely to give rise to symptoms of a very different nature from those of chorea. The muscular rigidity and spasm of tetanus differ widely from the jerking and feebly volitional movements of chorea. When you irritate the spinal cord by administering strychnine, how different are the phenomena you produce from those of chorea!

Nor can we explain the symptoms of this disease by referring them to derangement of the ganglionic system of nerves. We have no good reason to suppose that that system has any connection with the muscles of the extremities, or with the muscles of the eyeballs; and we do not find that the disease is apt to affect those parts which are largely supplied from the ganglionic system, as ought to be the case were it particularly engaged; indeed, I would go so far as to say, that if the ganglionic system be involved at all it must be so only in a secondary manner, and as a consequence of the primary affection of the encephalon.

State of the Fluids in Chorea.

Our views of the pathology of chorea would be very imperfect if we were to limit them to the consideration of a functional affection of a limited portion of the encephalon. How is it that so many persons within those limits of age in which the disease generally appears, are exposed with impunity to causes which would excite it in others? Why does it occur so exclusively in the early periods of life, and so rarely in adult age? Why so much more frequently in females than in males? These points would receive no elucidation were we to look upon chorea as resulting solely from an irritation

of the mesocephale, or of any other portion of the cerebro-spinal centre.

I have already directed your attention to a feature of the disease which, after all, is, in my mind, its most important one. I allude to that derangement of the general health which is conspicuous in nearly all the cases, and which generally precedes the appearance of the ordinary signs of the malady for a longer or shorter period. It often happens that the march of this derangement of health is so slow and insidious, as to elude the observation of the patient or of his friends. You will rarely, if ever, meet with a case, in which the signs of impaired nutrition are wanting. Chorea does not occur in the florid and robust, but in the pale, feeble, and irritable; it is not found in those who live well, enjoy good food, and good clothing, and breathe a wholesome and invigorating atmosphere, but in those who either have not these good things within their reach, or who, from debility or previous disease, are prevented from enjoying them; and the predisposing causes to which practical writers agree in assigning its production are all pre-eminently calculated to favour derangement of nutrition. Among these Dr. Copland places "hereditary predisposition, bad or deficient nourishment in early infancy, particularly an insufficient supply from the mother's or nurse's breast, or total deprivation of this nutriment; effeminate education and premature exercise of the mental powers; debility of the digestive and assimilative viscera; a neglected state of the bowels; confinement or sedentary occupations in low, unhealthy, or crowded places; low or innutritious diet, especially vegetable food; impure miasmal air; want of personal cleanliness; and the scrofulous and rheumatic diathesis."

The frequent occurrence of chorea in the rheumatic state of constitution is highly favourable to these views. I have on several occasions pointed out to you how prejudicial to the process of hæmatosis or the formation of healthy blood, the rheumatic diathesis is. Moreover, we now and then find in adults of gouty habit, or whose nutrition has been deranged, symptoms nearly resembling those of chorea, and which are doubtless due to a similar cause.

We must, then, look to the state of the blood as contributing to produce what is called the predisposition to chorea. Some of the normal elements of this fluid, the colouring matter in particular, are deficient,—or possibly, as in the rheumatic constitution, some preternatural element may be present to contaminate or vitiate it. The nutrition of the nervous system suffers with that of the other textures, and consequently when any portion of it is unduly excited, a morbid action of that portion is apt to continue.

I might offer the following explanation of the production of chorea:—General nutrition becomes impaired under the influence of any or of several of the causes which I have before enumerated. That state of constitution is now produced which predisposes to the disease. The patient receives a sudden fright; the physiological action of the mesocephale becomes disturbed, and that disturbance, which, in a healthy constitution, would speedily right itself, becomes increased and prolonged in consequence of the previous enfeebled state of the nervous system; or there has been no excitement of emotion, but a distant irritation is propagated to the centre, from the intestinal canal, or from the gums, as in dentition, or from the ovaries or uterus, and this is sufficient to disturb the action of the centre, and to give rise to the peculiar movements. Thus chorea must be regarded as a constitutional malady, in which, as is often the case in other diseases affecting the whole system, the morbid action becomes concentrated at one part, under the influence of various exciting causes.

A good argument in favour of these views of the pathology of chorea may be drawn from the nervous affections, resembling chorea in many points, which appear in persons who are exposed to the fumes of mercury, or of lead, or who habitually indulge in free potations of beer and spirits; or from that nervous trembling which is so often present in those who have had a large dose of the typhoid poison.

It is interesting to remark that in those cases where chorea is traceable to fright, the peculiar movements rarely show themselves *immediately* upon the occurrence of the fright. This was exemplified in the cases of both Sleet and Lowe. In the former the fright occurred on the 29th of March, and on the evening of the following day the first sign of chorea showed itself in irregular movements of the eyes. Lowe was frightened in the street at about eleven o'clock in the morning of the 19th of March; she became hysterical almost immediately afterwards, but quickly recovered, and on the following morning the movements of chorea showed themselves upon her getting out of bed. To produce that degree of disturbance which is necessary to create the amount of abnormal action of the mesocephale sufficient to produce choreal movements, is not in general the work of a moment.

Treatment of Chorea.

The treatment of chorea which is now most generally and successfully adopted, has not been based upon any theory of the disease, but is founded upon the lessons of experience; and, indeed, the success of that treatment may be adduced as an argument in favour of the constitutional nature of the disease. The object of it is to improve and give tone to the constitution by promoting a healthy and vigorous nutrition, without any

interference, mechanical or otherwise, with the ostensible phenomena of the disease. In truth, the movements of chorea are not to be restrained. If you attempt to hold down a limb affected with these involuntary jerking movements, they become tenfold more violent, and there is danger of converting a partial into a general chorea. When we tried to restrain the girl Sleet, who was suffering from general chorea, she became excited to a most fearful extent, and it was evident that a perseverance in the attempt would have been productive of mischief. You must, therefore, avoid everything like restraint, provide against the possibility of your patient being injured in the violence of the movements, but give him as free a space to move in as you can.

In the treatment of the ordinary and more chronic form of chorea the following points demand your attention:—You should first provide as good air for your patient as you can. The removal of the children of the poor from the dark rooms which they inhabit into the light atmosphere of a well-ventilated hospital is generally an important step in the cure.

The next point to be attended to is cleanliness, with friction of the skin. The means employed for these purposes must assist materially the function of the skin, and promote both cutaneous secretion and cutaneous respiration. To secure good clothing, and to keep the surface warm, are also important objects to be gained if children are to be restored to a healthy state of nutrition; and lastly, you must give your patient a wholesome and nutritious diet, with a proper allowance of animal food, and porter or wine in moderate quantities when there is much debility or when the movements are constant and exhausting. These means will be often successful, even if employed alone, and they must be continued after the movements have ceased in order to guard as much as possible against relapse.

The use of purgatives should be had recourse to very early, and with a twofold object, first, to carry off any noxious secretions that may have been formed in the intestinal canal, and to assist in improving the character of the secretions; and, secondly, with a view to the dislodgement of intestinal worms, which may exist in the bowels, and may keep up a continued irritation. In some cases purgatives have been the only medicines employed, and they have been successful, either by removing some source of irritation, or by improving the general health. The medicines of this class which I generally employ are calomel and jalap in combination, or castor-oil and turpentine; and when there is good reason to suspect the presence of worms, I continue the use of them, but especially of turpentine, for some time. You must take care not to purge too actively, for the effect of such practice would be to weaken your patient, and by the irritation of the bowels to prolong the convulsive action. You may leave off the purgatives, or have recourse to them only occasionally, when you find the secretions of the bowels assume a healthy appearance, and when you feel satisfied that no worms infest the intestinal canal.

You must now call in the aid of tonic remedies, and you cannot do so at a better time than when the secretions have been improved by the use of purgatives, and the pores of the skin opened by ablution and friction. The best tonic we can have recourse to is the tepid or cold shower-bath, especially the latter. The tonic influence of cold is of great power in this disease, as it is in all instances of enfeebled states of the nervous system. In employing this remedy, however, you must take care not to alarm your patient; I have known chorea to be brought on by the sudden shock of the shower-bath. To avoid the shock it may be advisable to begin by using the hand shower-bath, which we found decidedly useful in both Lowe's and Sleet's cases; or you should, at first, employ but a small quantity of water, which can be afterwards gradually increased.

Of medicinal tonics the best are the preparations of the metals and sulphate of quinine, which latter may be advantageously combined with some one of the metallic salts. The preparations of iron are the most generally applicable to this disease. You may give the sulphate of iron, or the muriated tincture, or the mistura ferri, or the carbonate of iron, or the saccharated carbonate of the Edinburgh Pharmacopœia. The sulphate is that which I have most frequently employed, and you know that I do not hesitate to use it in very large doses after I have satisfied myself that the patient will bear it.

The sulphate of zinc is also a very valuable tonic, often very serviceable in this complaint. You begin it in the quantity of a grain three times a day, and you may gradually increase it to several grains for each dose.

I have not used either lead, copper, or mercury, in this disease, nor is there anything in their medicinal properties which would suggest the propriety of having recourse to them. Mercury may be used as an alterative, or to act on the secretions of the liver, but it cannot be useful for any other purpose; and, moreover, it is liable to this objection, that if salivation should come on in an enfeebled state of constitution the consequences may be very serious.

Arsenic has been a good deal used in this disease, and with unquestionable benefit. But if I can cure my patients with iron or zinc, I would rather not employ arsenic. This metal, like mercury, is capable, after a longer or shorter time, of producing a cachectic state peculiar to itself, against

which you have no means of providing. I therefore advise you to reserve the use of arsenic to the last, in your list of expedients for the cure of chorea. There is no doubt that a very large proportion of the cases are curable without the necessity of having recourse to this poison.

It seems almost superfluous, after what has been said, to warn you against the employment of antiphlogistic measures in this disease. Bleeding, whether general or local, can do no good, and if the movements have ceased under the use of it, it must have been in consequence of great exhaustion and debility induced by it. Dr. Willan very justly condemns the ancient practice of bleeding in this disease, and he makes the following remark, which deserves to be quoted as a caution to those who are apt to draw hasty conclusions from solitary or few cases. He says, "A case, inserted by myself in the 'London Med. Journ.,' vol. vii., may seem to contradict the above assertion (against bleeding); but it is just and proper now to say that I met with the fate of other hasty case-writers. Before the volume recording it was circulated, my patient had a severe relapse, and was at length cured by a very different plan." (Reports on the Diseases of London.)

Opiates, and the whole class of sedatives, appear to me to possess no value in the treatment of chorea. You saw of how little avail even pretty large doses of morphia were in the case of Sleet, when a little sleep would have been of decided service. I have a theoretical objection to the use of opiates in this disease. They affect the brain, and even when they produce sleep, they are apt to leave after them a disturbed state of that organ. Now I should fear that the administration of opium in chorea would add fuel to the fire which already exists in at least a portion of the encephalon; and certainly I have never seen real good result from its use.

In the treatment of the general form of chorea, when of the violent kind exhibited in Sarah Sleet's case, your great object must be literally to strive and prevent your patient from dying of exhaustion. It was with this view that I gave large quantities of solid food, and of wine and porter, and very frequent and large doses of sulphate of iron and quinine; and the practice was attended with the most marked benefit. You should also make it a point to try cold, either by splashing the surface or by the hand shower-bath. The use of these means certainly seemed to be the first thing which procured sleep to our patient. And I repeat it, that in these violent cases an object of primary importance should be to procure sleep, if possible, without narcotics, which by disturbing the brain may do more harm than good. Cold to the surface of the trunk, producing reaction, or cold to the head, are valuable expedients for this purpose.

[Since this lecture was given I have seen Dr. James Arthur Wilson's able Essay on Chorea, in which he adduces several interesting facts in proof of the constitutional nature of the malady. Dr. Wilson, however, rejects altogether the nervous theory, and attributes the phenomena to a morbid blood affecting the muscular system. It seems impossible by this hypothesis to explain the partial forms of chorea, or to account for the paralysis which it often leaves behind it, or the imbecility or idiotcy into which it often degenerates; these facts indicate, beyond a doubt, that the nutrition of the nervous system is impaired.]

PRECEPTS ON BLEEDING.

After all severe accidents and serious operations watch for any attack on the lungs. Avoid raising inflammation, by forbidding solid food, by giving acidulated drink and effervescing draughts and antimonials, by sponging, in dryness of the skin and feverish heat, by cleanliness and ventilation. When you use the lancet, consider the firmness of the coagulum as much as the buffy coat. If the coagulum be flat and easily broken, resort to other remedies than bleeding. Always judge of the pulse in conjunction with the state of the blood. Mind that it will sometimes rise from bleeding, as in inflammation of the viscera. It will throb so as to deceive you, when further depletion would be fatal. Mistake not irritation for inflammation. In general, inflammations which are attributable to morbid states of the system, do not bear bleeding like that inflammation which follows a wound or an operation. A *jar* indicates irritation after the inflammatory strength has been subdued. You may bleed in the young and robust where in older patients you should avoid it. Consider the organ which is inflamed. If the heart, the lungs, the brain, the eye, you bleed freely. But always save strength for recovery. Local bleeding is always safe. Use not counter-irritants in acute inflammation. Reserve them for the chronic stage. Use evaporating lotions; sometimes iced water, as in compound dislocations. Learn to use syphon-threads, to secure a continual flow of cold water over the inflamed surface. Or prescribe the lotion of acetate of lead; or of muriate of ammonia; but not in critical phlegmons, nor, in them, any repellant; nor attempt resolution. In all constitutional affections prefer tepid anodyne applications to cold. Observe this in hernia humoralis. But in a constitution exhausted by dissipation these evacuants and refrigerants prove of no avail. Then employ emetics and opium, or, these failing, resort to stimulants, porter, gin, as in delirium tremens.—*Sir Charles Bell's Lectures at Edinburgh.*

ON

STRANGULATED HERNIA;

WITH PROPOSALS FOR

ALTERATIONS IN ITS TREATMENT.

BY

JAMES ARNOTT, M.D., Brighton, formerly Superintending Surgeon in the East India Company's Service.

(Continued from page 435.)

IN the directions which have been given in the preceding part of this paper for perfecting and combining the means of applying pressure and cold to the hernial tumour, it has been omitted to state that the patient should be placed in the same posture during their application as for the operation of the taxis. But as the recumbent posture could scarcely be maintained during the whole of the period that would generally be required for the replacement of "irreducible hernia," it would be desirable in such cases to substitute, at intervals, for the combined measures of cold and the pressure of water, the equable pressure of condensed air, in the manner proposed in an article on the application of fluid pressure to the surface of the body, in the appendix to the last edition of my treatise on Strictures of the Urethra, and transferred from thence to the "Medico-Chirurgical Review" for 1841. The principle of thus employing fluid pressure may be variously applied according to the peculiarities of the various cases in which it may be used; but in whatever mode it is done, the spirit of this direction in the paper referred to ought to be carefully complied with,—that the part of the Macintosh air-case in contact with the skin must be "thin, and of larger dimensions than the outer part, for the purpose of its coming closely in contact with all the inequalities of the surface." It is proper, also, in applying either air or water in this manner to hernia, to confine its action, as much as possible, to the tumour, and thus avoid any unnecessary pressure upon the abdominal parietes.

Perhaps no department of the subject of hernia stands in greater need of revision than that of the treatment of irreducible hernia. In general, after a few unsuccessful attempts at reduction, if there be no symptoms of strangulation, no further attempt is made, and the patient being deemed incurable is left with instructions to avoid as well as he can during his life everything likely to injure or inflame the hernial tumour, or which may cause the further protrusion and strangulation of the intestine. This hopelessness of the power of affording relief proceeds from an erroneous notion that adhesions and not increase of substance or congestion prevent the replacement of the hernia; and that adhesions, when they do exist, will not yield to any treatment but the dangerous and inadmissible expedient of the knife.

That pressure steadily applied will cause the absorption of morbid growths or adventitious matter, has been proved by numberless well authenticated observations and experiments, and is, indeed, a fact now undisputed. The pressure of an elastic bandage has often been advantageously used to promote absorption in chronic hernial tumours; even scirrhous and malignant tumours have been found to yield to it. And that pressure can be much more uniformly and equally applied as well as more easily controlled by means of a fluid than by the bandage, must be admitted by every one who will reflect upon the difference between applying a bandage to the top of a globular tumour and keeping this surrounded by, or imbedded in, a bag of condensed elastic air. By these qualities of fluid pressure, the injurious irritation or inflammation which has so often put a stop to the attempt at curing various diseases by other modes of pressure, will be effectually prevented. It is not, however, a very uncommon mistake to suppose that when one mode of treatment is only an improvement on another, and not very different in principle, it cannot materially signify which mode is employed; and yet it would be just as reasonable to expect, in administering a medicine which only fulfils the indication of cure when a certain dose is given, that the same beneficial effect should be produced by the exhibition of a smaller quantity. The instance of irreducible hernia is not, indeed, so good an illustration of this as strangulated hernia, for the diminution of which the pressure of the hand is applied in the taxis, because considerable benefit may be received from only partially diminishing its size; but unless the bulk can be lessened to a certain degree, there cannot be obtained that immunity from danger which the complete reduction of the hernia can alone afford.

The possible effect of the taxis which I have suggested above, in drawing a fresh portion of intestine into the hernial sac, is not likely to occur when the pressure is equally made by a fluid; consequently, there would be no opposition from this cause to the salutary force that may be exerted in the contrary direction by the gut within the abdomen. If it be deemed advisable, at any time, to attempt with caution to draw another portion of intestine into the sac, it should be done in a more direct manner than by the unequal pressure of the taxis; and this would probably have been more frequently attempted had it occurred that in the cases where strangulation arises from the gut, which is encircled by the ring becoming inflamed and tumefied, the strangulation would cease were the swollen gut replaced by a healthy portion of smaller diameter. Of course, under these circumstances, the hernia would continue irreducible for some time

after the removal of the strangulation; nor would it be proper to endeavour to reduce it soon afterwards; for independently of any such endeavour, the strangulation might be renewed by the lately liberated portion being again drawn into the ring by the action of the intestine in the abdomen, before its tumefaction has subsided to the requisite degree.

The next proceeding which I have to submit for the consideration of surgeons, may be employed when other measures have proved ineffectual, and before adhesions have formed, or the lesion of the intestine is so great as to prohibit any attempt at relief but by the removal of the stricture by "operation."

This proceeding is, to distend, by a copious injection of fluid, the intestine immediately below and connected with the strangulated portion, and thus gradually to withdraw it from the sac. The principle of this practice has already been adverted to when explaining the various modes in which the taxis operates; and it may be illustrated by a very simple experiment more satisfactorily than by any further explanation. Put a loop or fold of the intestine of a pig between two fingers, and distend it by a syringe, whilst the fingers are strongly grasping the loop. Immediately on the gut's becoming filled, its loop (representing the strangulated portion in hernia) is gradually but powerfully withdrawn from between the fingers.

In strangulation of the cœcum or colon (the latter of which is the gut most frequently protruded in umbilical hernia), such a mode would afford a speedy means of relief; but where the small intestine is contained in the rupture, the case is materially altered. The injection must then be forced beyond what has been termed the valve of the ileum.

That this has frequently been accomplished, and successfully, for the cure of obstruction in the upper portion of the intestinal tube, cannot be doubted, if the assertions of eminent men as to matters of fact are to be held of the slightest value. Cullen adopted the practice in ileus, on the advice of De Haen, and declares that he found it most powerful and effectual. In a paper contained in the second volume of the "Transactions of the Medical Society of London," Dr. Adair states that he only failed in two out of twelve or fourteen cases in which he had used this remedy. Dr. A. T. Thomson succeeded in two instances.

Other authorities may be adduced on the subject of forcing the valve of the colon. De Haen, in some experiments upon a dog, forced the contents of an injection into the stomach, from which they were ejected by the mouth. Abernethy (Lectures, LANCET, vol. xi.,) mentions he had seen cases in which clysters had been vomited, the people living "long and happily" afterwards. Haller (if my memory does not deceive me) mentions the same fact, as also does Heberden in his "Commentaries;" and if the following opinion of a high authority be correct, there would be little difficulty of injecting the small intestines in the disease now under consideration:—"As soon," says Sir Astley Cooper (lectures, LANCET, vol. ii.), "as any portion of the intestines is strangulated, the anti-peristaltic motion begins; the valve of the ileum is of no use."

It is exceedingly probable that many of the cases of supposed intus-susceptio cured by copious injections of water or air, were really cases of internal or concealed hernia; for it is perhaps impossible in the present state of our knowledge to distinguish these diseases from each other by their symptoms. A fatal case of ileus, which occurred lately in this town, and which was treated as arising from intus-susceptio, was discovered by a post mortem examination to have proceeded from hernia through the foramen ovale.

As further illustration of the difficulty of discrimination by the symptoms alone, and the necessity of watching the effects of remedies in order to establish the diagnosis, I may relate a few particulars of another case of late occurrence in which I was myself consulted, and where there was danger of falling into the opposite mistake. The patient, a young lady, had received a severe fall, and soon afterwards observed a swelling in the usual seat of femoral hernia, which became painful; and as there was also present considerable intestinal irritation, the symptoms were naturally enough supposed to be those of strangulated hernia. There were circumstances, however, connected with the appearance and sensibility of the tumour that created doubt, and authorised the exhibition of remedies for intestinal irritation originating from common causes. Under this treatment the irritation very soon subsided, and the enlargement of the absorbent gland (for such was the nature of the tumour) was gradually removed by the appropriate measures.

The more obvious and intelligible benefit that might be expected from copious injections in concealed and internal hernia than in intus susceptio, will, it may be hoped, induce practitioners more frequently to have recourse to them in obstinate ileus; for hitherto, when the usual remedies administered in the commencement of the disease have failed, there remains no substitute for this practice on which the slightest reliance is placed. Crude mercury is still, indeed, occasionally employed in this hopeless state rather than that nothing should be done, but most writers on ileus condemn its use as being in opposition to an obvious principle in mechanics; supposing that it cannot remove obstructions in consequence of its at once descending, from its weight, to the lowest

part of the abdomen. This objection, however, might probably be removed in a great degree by frequently altering the position of the patient; and if the mercury were given in small and repeated doses, it would have a better chance of reaching the seat of the obstruction, in consequence of the peristaltic action of the intestine overcoming the action of gravity. In cases of fixed internal and outward but concealed hernia, mercury thus administered, and with varied position of the patient, would promise more advantage in pulling out the strangulated noose, than when used in intus-susceptio, certain varieties of which, indeed, it cannot possibly affect.

While adverting to this subject it may not be deemed very irrelevant to remark, that amongst the remedies to be tried in obstinate ileus (so varied and uncertain in its proximate cause) mercury pushed rapidly to ptyalism deserves a prominent place. In a part of the world where the disease is more frequent than in Europe, I have often witnessed the immediate removal of obstruction by the constitutional influence of mercury carried to this extent, although it would be difficult to give a satisfactory explanation of its mode of operation. Whatever causes obstruction to the passage of the fæcal contents of the bowel, whether strangulation, inflammation, or spasm, will produce an iliac disturbance of its functions, and mercury, by its counter-irritating quality, may probably remove one or other of the latter conditions.

Attention to the admirable provisions which nature makes to facilitate the passage of the contents of the intestines, would of itself lead us to apprehend much mischief from these or other causes of obstruction. The copious and ever present mucous secretion from the villous coat of the smaller intestine, and the great dilatability of its calibre, as well as the ease with which the contiguous parts may be moved, would, but for the occasional action of its muscular coat, render the passage of its contents almost as easy as if they were passing through a fluid. In the larger intestines there may be less facility in this respect, but in their healthy condition the only real impediment is experienced at the termination of the tube. Here another provision facilitates the expulsion of the fæces. The inner coat of the intestine is, during this function, protruded beyond the sphincter of the rectum, and the fæces have thus the same smooth and well-lubricated surface continued for their expulsion over which they had hitherto passed, and are ejected without (in the perfectly healthy condition) coming in contact with the neighbouring parts.*

Drs. Adair and Bureau, in the volume of the Medical Transactions referred to, describe two instruments by which the small intestine may be injected: one is constructed on the principle of the stomach-pump at present in use; the other is a long tube with a reservoir at its upper end, by means of which the liquid is injected by its own pressure, and which plan, it is stated, has the advantage of enabling the operator easily to regulate the degree of pressure by raising or lowering the small reservoir or funnel.†

* Comparatively slight as this impediment is at the termination of the intestinal tube, many disorders, nevertheless, proceed from it,—contributing to make the rectum one of the most frequently diseased organs in the human body. Of these, none causes more distress, or is more obstinate to the milder treatment usually adopted for its cure than spasmodic irritation of the sphincter, whether this be accompanied or not by fissures or abrasion of the skin. I am happy to state that I have lately succeeded in relieving several cases of this affection by desiring the patient to use the very simple expedient of inserting every day, for about a minute, a conical piece of common yellow soap, of considerable diameter, previously dipped in warm water. There are combined in this application the remedial agencies of the sedative of the alkali, and distention by the smoothest possible bougie. But the most important circumstance is, that the alkali is applied to the whole irritable surface instead of being confined to a few parts of it, as is usually the case in these local applications. I shall probably, on some future occasion, describe another mode of accomplishing the very desirable end of bringing medicaments in contact with the whole of the diseased surface of a canal, by an instrument constructed on the principle of the fluid dilator. The obstinacy of leucorrhœa and other similar discharges may be attributed in great measure to the neglect of this important principle. The alkali, in the above application of it, acts, I presume, as it does when applied to remove irritation from a stricture in the urethra. Mr. Whately, who introduced this practice, had better perhaps have applied soap already made, than manufactured it in the urethra by the combination of his potassa with the animal secretions. A solution of lunar caustic, applied by the instrument adverted to, is an excellent remedy in irritations of the mucous canals.

† Pewter tube, similar to that used in the current apparatus for the production of cold, will answer very well for this latter means of injecting. A tube of several feet, having its upper end stuck in a cork closing the neck of a funnel, and having its lower end rounded by dropping sealing-wax upon it, constitutes the simplest possible enema apparatus; and as the stream of water from it is uniform, it is generally, perhaps, preferable to the syringe. Dividing the tube near its lower extremity, and reuniting the pieces by the medium of a bit of strong gut, or tube made of caout-

There is a figure of a sucking and forcing syringe for copious injections in hernia, given in Latta's Surgery, by which, he informs us, he had injected from one to five pounds; and he conceived that "not only the colon but probably the small intestine lying between the cæcum, and contraction was distended." His purpose was to empty the bowels, and thus, of course, diminish the resistance from the abdominal parietes to the return of the protruded intestine or its contents, as well as to excite the peristaltic motion of the intestines, both by stimulating them and removing their distention. Dr. O'Beirne, of Dublin, has modified the operation of injection for the accomplishment of the former purpose, by passing a tube further than is usual into the bowel, and, as appears from his experience, with great advantage. Clysters, as a remedy in hernia, were formerly in considerable esteem, and many instances of success from their use were, doubtless, owing to their action on the principle I have been illustrating. It is to be regretted that the misunderstanding of this their more important operation should have prevented the efficacious application of them, and consequently led to their disuse.

If the stricture on the intestine by the ring be not great, the liquid of a copious injection distending its lower part within the abdomen, instead of withdrawing the strangulated loop, would enter it. Such an occurrence would be rare, and could hardly occur if the gut was really strangulated; but where it did occur no mischief would be done if care be taken to preserve a moderate pressure on the hernial tumour. On the contrary, benefit would probably result from the distention of the neck of the sac. Of course, it would be improper to make the attempt thus to withdraw the intestine from the sac while the strangulated portion is yet evidently much enlarged or distended, or where from the delay that has taken place, there would be objection to traction of any degree, and however produced. Yet how often has it happened that the strangulated intestine has been drawn into the abdomen by the peristaltic action of the bowel within, and the patient thus saved, after the tenderness of the parts and other circumstances have apparently left no other resource but the operation.

It need scarcely be observed that the injection of the small intestine will require a little more art than is usually exercised on such occasions. The first attempts may fail, but the sensibility of the parts will soon be sufficiently reduced to allow of the requisite distention.

On the failure of milder and safer measures recourse must be had to the operation of removing the stricture from the intestine by an instrument directly applied to it. The fibrous band constituting the stricture may either be dilated by stretching, or be cut. The latter, which is the only plan now in use, has already been adverted to. The advantages of dilatation over cutting, could it be as easily practised, would be the avoidance of the dangers of hæmorrhage and of wounding the intestine; and, as the opening in the peritoneum would be of less extent and farther removed from the cavity of the abdomen, there would be less danger of its inflammation.

The objections which have been made to the stretching of the ring have referred more to the instruments employed than to the principle itself. These, it has been said, are so bulky that where they can easily be introduced no stricture can exist, and consequently, ruptures apparently so reduced might have been reduced by the taxis; and where force has been used the gut has been exposed to injury from bruising. There is, undoubtedly, much truth in these allegations, but methods for fulfilling the indications may be contrived to which such objections would not apply.

Two or more broad flat probes, with wedge-like blunt points, might often be inserted on opposite sides of the intestine, and the stricture be stretched by separating them in a parallel direction, either by the hands alone or by easily contrived mechanism on the principle of the hand-screw. There must be two or more such probes used to prevent any injurious pressure on the intestine; and to this necessity not having been recognised may perhaps be attributed, in some measure, the disuse of the plan. The fluid dilator, which I have endeavoured to introduce generally into surgery, and which is so incomparably superior to other means of dilatation for the extraction of stone from the male or female bladder, as well as for the removal of contractions from the passages, is not so applicable here. In cases, however, where only a little more distention is required than the taxis can accomplish, it might be employed with safety. Its flexibility, little bulk when collapsed, and eccentrical action, are valuable qualities with respect to such an use of it; and where it could not itself safely produce the necessary extent of dilatation, it might facilitate the application of other measures.

To some varieties of the disease doubtless dilatation would be more applicable than to others; but, at present, all cases where the attempt at reduction by pressure fails after the strangulated parts have been exposed by the opening of the sac, however they may vary as to the character of the stricture or the dilatability of the ring, are subjected to the knife.

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choue cloth, furnishes a ready and convenient substitute for a stop-cock. Pewter tube of this description is manufactured by Mr. Stanton, of Shoe-lane, and sold for a few pence per foot.

When the principle of dilating the stricture in hernia was revived in France about the middle of the last century (for it was probably from its obvious nature the original operation), the same principle applied to the extraction of urinary calculus was falling rapidly into disrepute, or, more properly, out of fashion. The remarkable change that has taken place of late years in the manner of performing lithotomy, in which dilatation, so long condemned as a barbarous practice, has now nearly superseded the use of the knife in opening a passage into the bladder, may dispose surgeons to examine a little more closely the validity of the objections that have been made to dilatation in hernia, and to ascertain whether they are the result of sound and unprejudiced reasonings on the subject. Authority is against this practice, but so has it been against a great many practices in surgery that nevertheless were the best that could be adopted; and, without wandering from the subject of hernia, a sufficient example of the worthlessness of mere authority in such matters is conspicuous in the late valuable revival, principally by the efforts of Mr. Key, of Petit's much condemned operation of dividing the stricture outside the peritoneal sac.

By lessening the danger of the operation and facilitating its performance, the important advantage would, moreover, be gained, of removing the causes of a fatal delay in having recourse to this final measure amongst surgeons unpractised in operations. There are two erroneous extremes in the management of strangulated hernia,—trusting too confidently, or for too long a period, to other measures than the knife; and, on the other hand, having recourse to this before other milder and safer measures have had sufficient trial; but of these extremes the latter may be deemed the less dangerous.*

* The idea of dilating instead of cutting the stricture in hernia had occurred to me long before I discovered, by a note in one of the later editions of Mr Lawrence's excellent treatise, that M. Le Blanc had practised such a method in France nearly a hundred years ago. The comparative results of the plan I cannot state, as I have not the opportunity of reading M. Le Blanc's work; the whole of my information on the subject of the dilatation of the stricture in hernia having been gathered from this note, and a notice of it in an article by the late M. Sanson, in the "Dictionaire de Medicine et de Chirurgie."

It is much to be regretted that the books in such a library as that of the London College of Surgeons cannot, by the present regulations, be referred to by persons living at a distance from the metropolis. Were they, or, at least, a certain class of them, to be circulated over the kingdom, at certain times of the year, the members of the college resident in London would not be put to much inconvenience, particularly as other medical libraries, such as that at the British Museum, are accessible there during the whole year. On the contrary, it may be presumed that the metropolitan members of the college would be pleased by an arrangement which would enable three-fourths of the whole number of members to participate in advantages from which they are now virtually excluded. There might be a little additional expense thus created, but the college has ample means to defray this; and its funds would receive compensation to a certain amount in the extended sale of the lately published voluminous classified catalogue of books, a truly valuable work, for which the members are much indebted to the labours of their learned and talented librarian.

Much of the difficulty that would have impeded such an arrangement in former times is now removed by the facility of communication that exists between London and most parts of the kingdom.

No means should be neglected in the present day, by those in whose hands the management of such concerns has been placed, to keep alive that love and zeal for their profession, which it may be presumed the greater number of medical men acquire during their earlier studies, from the perusal of the classical writers on medicine, and the attendance at the prelections of its distinguished teachers. There are opposing influences at work which it would be invidious to specify; but it is certain that on entering the practice of their profession, whatever ardour young practitioners may have acquired for its science is in great danger of being very considerably damped, if not extinguished, unless

Before concluding this paper some apology is due for my having entered upon a subject already so much investigated,—a subject which does not constitute part of those professional studies or occupations to which I must now principally direct my attention, and for the practical study of which, the opportunities of a practitioner in a provincial town of no great extent, and whose inhabitants, from their occupations, are little exposed to hernia (even were he made acquainted with every case occurring) must necessarily be limited. In answer to the first objection, I would refer to the already-mentioned disproportionate attention which appears to have been given to the "operation" for hernia; and in explanation of my having engaged in this inquiry under the disadvantages specified, it is necessary to state that I formerly enjoyed sufficient opportunities of obtaining practical acquaintance with the several varieties of this disease to furnish a sure foundation for subsequent reflections upon the subject.

Although the suggestions which I have made of improvement in the treatment of

hernia cannot be said to have had their value confirmed by experience, yet as remedial measures analogous to two of the principal suggestions have been in common use, the effects of these, at least, can easily be appreciated by comparison. The mode of causing pressure on the hernial tumour has hitherto been very imperfect. It has not only often failed in relieving, on account of its own inherent defects, but in many cases, indirectly, by the fatigue which its application occasions to the surgeon, and the supposed necessity of attending to other measures, obliging him to desist from its use before any benefit has been obtained. Nor has the surgeon been able to employ it at the same time with cold applications to the part, and hence has been lost the combined action of these powerful and perfectly compatible remedies. The great objection that many have urged against delay in recourse to the operation does not hold against this combination; for while the cold will keep inflammation at bay, this and the pressure together must diminish the size of the protruded parts. The proposal of drawing the strangulated part out of the sac by distending the lower part of the intestine in the abdomen, is founded on a principle new to surgery, and consequently does not admit of illustration from analogy; but this is by no means the case with respect to the remaining suggestion of dilating instead of cutting the stricture in the operation for hernia. This practice has, indeed, been opposed by authority (although, as I have said, this is of little account where the judgment is apt to be biassed by prejudices and other influences inimical to the investigation of truth), but authority has been highly favourable to the principle of dilating the hernial stricture when accomplished by other means. For what is the commonly-supposed object of the taxis but the dilatation of the constricted ring by forcing the protruded parts against it?—and the fluid contents of the intestine are forced against the closed ring by pressure applied to the hernia, just as an injection is sometimes forced against a constricted part of the urethra in retention of urine. While, therefore, the advantage of dilatation is admitted, when it is produced by one set of measures, surgeons should not be indisposed to examine into the character of its operation when otherwise effected.

Oriental-place, Brighton,
June 6, 1843.

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the proper means for its nourishment are at hand.

There might even be an incidental advantage in thus widely diffusing medical literature amongst the members of the profession, arising from the effect it would naturally have in keeping the rest of the world in mind that there is after all a science of medicine, or at least a vast accumulation of medical facts and important inferences from these, a knowledge of which can only be acquired by an acquaintance with the writings of its investigators and the exercise of the reasoning faculties. An observance of the life and habits of every medical man is scarcely sufficient to satisfy them of this; and hence are they more inclined to give credit to the boastings and absurdities of the quack, who now, with his numerous and systematic delusions, threatens to make (unless the law shall indirectly, by raising the character of the profession, put a stop to his progress) further inroads upon the province of the conscientious and well-informed practitioner.

COMPARATIVE LONGEVITY.

M. LEJONCOURT, a French author, announces that, during the last century, in England, 49 persons have died between the ages of 130 and 180 years; 7 of these persons were 134, four 138, two 146, four 155, one 159, one 160, one 168, one 169, and one 175. In Russia, in 1814, the official census reported 7 persons living, each upwards of 125 years, and one upwards of 160 years old. Of 1238 centenarians deceased in that empire, 125 died above 120 years, a hundred and eleven between 121 and 125, three between 126 and 130, five between 131 and 140, one at 145, three between 150 and 155, one at 160, and one at 165 years of age. Instances of longevity in France are not so numerous, but curious particulars respecting some of these are given by M. Lejoncourt. In 1710, Jean Mazard, a peasant of Berry, died aged 110. *He had been married ten times*, his latest union having been in his 100th year, with a girl of 18, who, two years afterwards, made him a father. In 1712, a man, at Chateau Vilain, died aged 114 years, who had had three wives and thirty children; and in the same year died an officer aged 115, leaving seventeen sons, the eldest of whom was seventy-four, and the youngest twelve years old! Proximity to medicinal substances would not seem to exert any very deleterious agency on the powers of the frame, since we are told of an apothecary who died at Chateaubriand in 1718, aged 107, who, having been twice married, had had sixteen children by each of his wives. He was in his 103rd year, when his second wife was delivered of healthy male twins, who themselves lived to be about ninety-five years of age. But neither do drugs seem absolutely necessary to preserve life, since we are also told of a man who died near Tulle, in 1757, aged 115½ years, and who, during his prolonged life, had never had any other illness than that which finally carried him off.

ASSES' milk contains but 8 per cent. of solid constituents, while cows' milk contains 12 per cent.

SECOND NOTE OF DR. GREEN

RESPECTING HIS CASE OF

LIVE ENTOZOON WORMS IN THE HUMAN SKIN.

To the Editor of THE LANCET.

SIR,—With reference to the rare case of entozoon worms, recorded by me in your Journal of the 27th of May last, I would observe that I refrained from publishing it earlier lest it should not be credited, being necessarily so briefly detailed, and, perhaps, I should not have published it at all had it not been for the inquiry from a correspondent contained in your number for the 13th of May.

Since its publication I was called on by Mr. Erasmus Wilson to know more of the facts, and by other medical gentlemen for the same purpose, and also to look at the said worms. The former gentleman is particularly interested in whatsoever relates to the organisation or disorganisation of the cutaneous tissues; he requested and took away with him four of the said worms, in order to submit them to the test of microscopic observation.

Subsequently Mr. Wilson wrote me a note saying the said worms appeared through the medium of the microscope to be nothing but hairs, and politely invited me with other medical gentlemen to meet at his house in order to examine and determine for ourselves, for that he (Mr. Wilson) believed a deception had been practised upon me by the lady patient, the subject of the ailment. The meeting took place on the evening of the 16th inst.

My own conviction relative to the worms being in direct variance with Mr. Wilson's, I previous to the meeting, took some of them to Professor Grant, an entomologist of acknowledged authority, who, with the aid of an eye-glass only, said "they looked like hairs, and nothing else, and that putting them under a microscope was of no earthly use, and as they had been kept in paper five or six years all true observation would consequently be lost; not so if I had fortunately put them in spirit when I collected them." Feeling the truth of my own eyes, manipulation, and senses, I also took some of them to Dr. Robert Willis, for the inspection of Professor Owen. Dr. Willis submitted them to Mr. Quekett, a gentleman well known to the profession for his tact with the microscope, and for his scientific investigations. Mr. Quekett's opinion was, that "the said worms looked like hairs, that as such he considered them, but that they had an unusual opakeness of character if they were hairs."

On the 16th inst. Mr. Wilson, Mr. Coulson, Mr. Toynbee, Mr. Brent, and myself, met at the house of the former gentleman to judge for ourselves. After witnessing some magnificent exhibitions through the aid of a very superior microscope of living follicular entozoon worms, taken by Mr. Wilson from the faces of two of the gentlemen present, we were next shown the minute construction of different kinds of hairs, as those from the hare, cat, cow, sheep, rabbit, &c., and also of human hairs taken from various parts of the body: the whole new to me, and wonderfully and beautifully impressive of omnipotent wisdom and design in forming these small objects so admirably for the ends intended, each minute particular changing in beauty of formation, agreeably with the varying adjustments of the instrument. Next were placed in the field of the microscope the identical worms, which I had previously entrusted to Mr. Wilson. The four gentlemen first observed them, and then came my turn, and here I must freely confess that the said worms looked so like the various beautiful minute hairs that I had immediately before been looking at, that I know not how to particularise a difference. That they were hairs was also the opinion of the four gentlemen named, and that a deception must have been practised upon me.

Now comes the question. Could any deception have been practised upon me? Could I have been deceived? Under the circumstances of the case I believe not; the lady, whoever she was, was a lady in manner, feeling, and expression. I do not know what motive she could have in deceiving me. She came to take the sulphur fumigating baths; did not ask for me; on the contrary, said "she did not want to see me," and she came in disguise as it were. She could not take these baths without loss of time, inconvenience, considerable expense, and exposure of the odious disease, as she called it. When she did see me, it was not until after the lady had had four of the fumigations, when, on learning from the attendant that I was angry, and reproved her for naming such nonsense to me, as she had done on the three previous occasions of taking the fumigations, the lady then said "it was of no use; I was like all the other doctors she had consulted at the west-end, but that if I had a mind to come into the dressing-room I might witness the fact." I did so. It was immediately after the fourth fumigation. I found the lady standing slightly covered; was cautioned, as I entered the room by the attendant, not to tread on the worms before they were swept up. On looking on the carpet I saw a reddish ring, and these turned out to be small filamentous worms which had fallen from the body of the patient whilst waiting for me to come into the room; they were bright pink, transparent and of various lengths. I examined the legs and arms, and was astonished to see them covered with worms, more or less in progress of escape. I examined the neck;

the appearances were the same; I next raised a shawl from the chest, and about the mammæ they were so innumerable as to be beyond description. I at last rudely wiped the chest, breaking hundreds of them, but effectually cleaning the surface; in a minute or two they were seen again protruding and jerking, or jumping out of, and from the skin. My presence was unpleasant to the lady, she averted her face, and partly covered it and her head with the shawl during the time, and whilst she gave me the short detail which appeared in your Journal of the 27th of last May. This exhibition of the escape of worms had been seen three times previously by the attendant, who, as I have said, reported to me, and also by the lady's grown-up daughter. The latter I did not see, probably from the same cause as actuated the mother, viz., a desire to avoid recognition, having so odious a complaint, as the patient called it.

I have now stated all I know of the matter, and this unique case must await the confirmation of time, aided, as it now may be, by the vastly improved microscopic instruments and the spirit of research which distinguishes the age. I named the case at the time of its occurrence to all the medical gentlemen I came in contact with, and showed the worms I had collected to very many of them, and they have never been out of my possession until distributed as herein stated. I fear, but have some reason to hope, that I may still be able to trace the subject of this case; if I learn anything more, confirmatory or otherwise, I shall consider it a duty to make it known.

I account for the worms so numerously appearing when I saw them, and after each fumigation, by the state of the skin being so softened and relaxed by the heat and vapour, and then the application of the sulphurous acid gas, making their situation so untenable that the said worms were glad to escape even from one death to another. Their shrivelled state and blackness, like hairs, is easily accounted for. It is reasonable to conclude that for cure the lady's medical advisers had resorted to mercury or other minerals; the sulphurous acid gas oxidising these would occasion the blackness, for when the system of persons is impregnated with mineral medicines, it is common for the skin and nails to assume a colour more or less black on the use of the sulphur fumigations, depending on the degree of saturation of the system with the medicine, and which continues until the desquamation which follows their use is effected. It should be recollected, too, that when this lady was warm and perspiring in bed, these worms were continually escaping on to the pillows, sheets, and bed-quilt, a subject of frequent annoying discussion with her husband, according to the lady's statement.

In conclusion, I cannot but remark, that it must be a subject of congratulation to find that there are so many vigilant philosophic minds on the watch and anxious for the maintenance of truth as the basis of all physiological and medical science.

To Mr. Erasmus Wilson in particular I feel greatly obliged for having been the main cause of mooting this inquiry and investigation, though still differing from him in opinion, for I cannot deny the evidence of my own senses, nor of those of the persons I have named, and particularly when it is considered that microscopic display is even yet notoriously defective. I will, however, indulge myself with one question, seeing that all *nature teems with life*. Why should not my entozoon worms live and inhabit the human body and its integuments as well as the entozoon follicular worms of Mr. Wilson, which I saw him so readily produce alive, and exhibit to us all, from the faces of two of the gentlemen present on the occasion of the inquiry? I am, Sir, &c.

J. Green, M.D., &c.

Great Marlborough-street,
June 43, 1843.

PHLEGMONOUS ERYSIPELAS.

Saline purgatives and antimonials are first employed, with warm diluent drinks. Give solution of sulphate of magnesia (or the sulphate and carbonate together), to which add antimonial wine, in small doses, every four hours, adding tincture of opium after the bowels have been relieved. Observe nicely the diminution of power, and change the practice to means which give support. If in hospital shift him to better ventilation, yet not to a cold stream of air. When the tongue is foul and yellow, with a bitter taste and nausea, vomits are of service, with calomel and opium at night, and, in the progress of the disease, bark and acids. Leeches to the part may be proper when the erysipelas is phlegmonous in character. Leeches, it is true, will produce erythema, but they relieve in the acute form. Blisters have been recommended to stop the course of inflammation. I have not employed them. It is with more confidence recommended to draw the lunar caustic round the edge of the inflammation. In the slighter cases the chalk-powder and cotton wadding are the best covering. Watch the first appearance of *effusion*, and open the skin freely with the scalpel instead of the lancet, otherwise the skin becomes undermined with matter, and sloughing of the cellular membrane follows. Mr. Lawrence has enforced, with great severity, free incision in erysipelas. If you use the lancet *early* there will be no occasion for large *incisions*. Nor blame yourself when you find no matter, but only serum.—*Sir Charles Bell.*

THE FUNCTIONS OF ARTERIES AS VESSELS OF CIRCULATION.

To the Editor of THE LANCET.

SIR,—Permit me to submit, through the columns of your widely-circulated Journal, a few observations on the distribution &c., of arteries, a branch of mechanical physiology which appears not to have met with the attention it deserves. I wish to leave entirely out of consideration any vital properties these vessels may be supposed to possess. Restricting myself, then, entirely to their mechanical functions as carriers of blood, it will be my aim to point out on what general principles we may explain their course, calibre, and direction, in the various parts through which they pass, or to which they supply the necessary quantity of blood. There is one law of the branching of arteries which obtains, almost without exception, throughout the whole body; and it is that wherever a branch is given off, the main trunk is turned from its course in the opposite direction exactly in proportion to the size of that branch; or, more correctly, if we consider the main trunk at that part where the branch goes off to be divided into two, itself and its branch, than we shall find these two going off invariably at angles more or less inclined to the axis of that trunk in inverse proportion to their size. Let us trace the arterial system with this view. The main branches of the arch of the aorta (innominata, left carotid, and subclavian), considerable vessels for the supply of the head and upper extremities, are sent off, say upwards, consequently the main trunk is deflected downwards, and thus becomes at length curved downwards. In the abdomen the cæliac axis, superior and inferior mesenteric, supplying large viscera and the whole alimentary canal almost, are given off forwards, and so, in accordance with the above law, the aorta is deflected and curved, as is the spine, backwards. But at the division of the two common iliacs, the branches being of equal size, they go off at equal angles. Again, the division of the common carotid into two of nearly equal size, is effected by their going off at equal angles; but the external is deflected from a straight direction as it gives off its several branches, although when its general course is considered, it is not curved, because the branches on one side do not preponderate over those of the opposite. The internal carotid gives off no branches, and is straight. The principal branches of the subclavian (vertebral, thyroid axis, &c.) are given off upwards, and we find the subclavian is turned downwards; and the same obtains in all the divisions of arteries, even to the extremities, where the palmar and plantar arches exhibit this to great advantage. But it cannot be easily illustrated in the extremities, although it may be seen very clearly in carefully drawn plates, but best in the injected subject.

Another law or principle derivable from the above may be expressed thus: every artery at its origin is directed to the centre of the part it supplies. The lower extremity may illustrate this best. The common iliac may be said generally to supply the pelvis, gluteal region, thigh, leg, and foot. If we place a lower extremity in the position it assumes when at rest, as in sleep, the centre of gravity of the part supplied by the common iliac, or the centre of its capillary circulation if you please, will be a point above the lower third and back of the thigh, and we may see that the common iliac at its origin branches outwards and slightly forwards to meet this point. But when this artery divides into external and internal what is their direction?—the internal goes downwards to the centre of the gluteal and pelvic regions, while the external, having the thigh, leg, and foot to nourish, is passed under Poupart's ligament, and turned more forwards towards a point in the middle of the thigh a little above the knee. Well, after the profunda has been bent *outwards* to the *outer* side of the thigh, the femoral is bent *inwards* to supply what remains of the lower extremity, and tends to a point near the centre of the calf, where the anterior and posterior tibial go off their direction, and the parts they supply obviously correspond, &c.; and this same may be traced to the ends of the toes, or in any other part of the body. And so in the injected subject, when we light upon an artery of unusual magnitude, or taking an unusual direction, we know that it must supply parts it does not usually supply, and consequently we may anticipate what size and direction some other artery or arteries of the limb may have. This is a well-known compensation principle in the dissecting-room.

A third important principle which may be introduced here is, that the whole system of arteries tend to that form of curve which is assumed by a fluid spouting from a tube, so that horizontal arteries are bent downwards, and these more than vessels in any other direction. This, I think, has been already alluded to by authors, and sufficiently illustrated under the head of the influence of gravity on the circulation; I need not therefore say anything more of it here.

With regard to anastomosis, this takes place where change of direction is liable to occur from position or posture, so as to throw an unusual quantity of blood upon a part, and the anastomosis is generally between it and another branch affected in the opposite way at the same time. Thus the carotids and vertebrals anastomose at the circle of Willis in such a manner that whatever motions of the head take place, or whatever position it may be in, the supply to the circle, from which alone the branches seem

to come off, is uniform. Very obvious anastomoses are seen in the superior and inferior mesenteric branches, and there we have every reason to suppose these vessels suffer considerable change of direction and position during the passage of the aliment. At all joints we may find anastomoses, and also between parts that are liable to move to and from each other. But in solid, firmly fixed viscera there is no need of it. There is none, for instance, in the substance of the kidney or the brain.

Further, when two flexible branch tubes are given off from a single trunk or tube,—if one branch be brought nearer to or farther from the axis of that trunk, the supply through this moved branch will become greater or less, and the other untouched branch will be moved out of its position by the altered force of the current through it, and alter its size, of course, so that the two branches together may still transmit the same supply as before. But in the living body at rest so perfect a balance appears to exist between the direction of an artery and its diameter, and consequently of the blood it carries, that there is reason to believe if it were possible to isolate the whole arterial system and still keep up the circulation, that every artery would retain its position unchanged, and its diameter unaltered; and if, during this state of things, pressure were made on any branch so as to change its direction, the nearer vessels to it, including the main trunk, and through it a number of ramifications, would exhibit an alteration of compensation, as it were, throughout their course, and in all their diameters.

Hitherto, what we have said applies to tubes of any kind, provided they be elastic, although carrying a fluid living or dead; but now we will call to our aid the well-proved fact that a living artery, deprived for any time of its former supply of blood, will not only contract, but do so permanently. Introducing this, then, as an element into our reasoning, let us see if we can throw any light upon the obscure changes taking place at the beginning of respiratory life. The only changes we have to do with are the lowering of the diaphragm and the raising of the ribs for the inflation of the lungs at the first inspiration. These are the mechanical changes, and what influence have they upon the heart? Simply this,—that both the aorta and pulmonary arteries are thereby raised more to a horizontal position, or, that is, more perpendicular to the descending aorta. But the branches of the aorta in fœtal life are, innominata, left carotid, and left subclavian, and, truly speaking, a fourth, which becomes afterwards the descending arch, sometimes less than either of the others, going to join the descending aorta; and the branches of the pulmonary artery are two to the lungs, and a third, the ductus arteriosus, like a continuation of the main trunk, which equals in diameter nearly while it joins the descending aorta. In the fœtus the balance of this portion of the circulation is perfectly in accordance with the principles above laid down; for the innominata, &c., go off at less angles with the axis of the aorta, according to their size, and so the descending arch being small is considerably bent downwards from the axis of the transverse arch; and the pulmonary artery is almost continuous, as it is but slightly larger in size, with the ductus arteriosus, while its pulmonary branches of less diameter are considerably bent from the axis

Fœtal Circulation.

After Respiration.

downwards. The raising of the aorta causes its blood to be thrown more directly into the descending arch, and less directly into the vessels supplying the head, neck, and upper extremities, and so the descending arch is distended, and soon equals in size the rest of the aorta. The raising of the pulmonary artery to a more horizontal position brings it more into the direction of the pulmonary branches and leaves the ductus arteriosus to branch off angularly; and so the pulmonary arteries increase in diameter, while the ductus arteriosus diminishes, and at length dwindles to a ligament in most cases.

Another application, but a practical one, of these principles is to the cure of aneurism. We have seen how the direction and branching off of an artery influences its diameter and the current of its blood, and the condition of its anastomoses, for the ductus arteriosus may be considered an anastomosis, and we may, with good reason, deduce therefrom

that lateral pressure and a well-considered posture of a limb may become important auxiliaries in our treatment of some aneurisms, which I am happy to find have now, by better applied mechanical means, become curable without operation. I am, Sir, your obedient servant,

S. LIVESAY, M.D.

Devonshire-street, Queen's-square,
June 15, 1843.

THE LANCET.

London, Saturday, July 1, 1843.

A "SOLIDO-HUMORAL PATHOLOGY," says Dr. TODD, the professor of physiology at King's College, and physician to King's College Hospital, in his recent volume "On Gout and Rheumatism," is the most consistent with the laws of the nutritive process.

This work of Dr. TODD we have scrutinised with some interest, for the purpose of learning wherein consists the difference between a SOLIDO-HUMORALIST, and a HUMORAL PATHOLOGIST of the first water. The case may be usefully stated,—our readers, however, being left to form their own opinions on the point in debate.

HIPPOCRATES recognised three parts in the human body, namely, the containing, or *solid* parts; the contained, or *liquid* parts, and a general principle, which he called *nature*; and he held that a *change* in the fluids, or in the solids, or in both, might constitute a *disease*.

Likening the body to a cullender, the methodic sect had their *strictum* and *laxum* of its pores, which furnished indications of cure in all diseases, and were incorporated in the humoral pathology of succeeding ages.

GALEN held that when the humours or solids of the body were deranged or disunited, disease must be present.

The animists or vitalists, including VAN HELMONT, STAHL, and even HOFFMAN, together with atony and spasm of the solids, made the blood and lymph the receptacles and vehicles of the ethereal fluid, and admitted putrid, poisonous, or depraved humours, as the causes of diseases.

In the Boerhaavian system all diseases are diseases of the solids, or the fluids, or both. The doctrine of laxity and rigidity of fibre is received as fundamental; and fever is an affection of life, endeavouring to avoid death.

Although, therefore, the solids, and the powers of life, were by no means disregarded, yet in all these systems the state of the fluids, as containing the moving elements, was the primary consideration in the rationale of disease, and all have been conventionally classed together as the humoral pathology of by-gone centuries.

Let us now see, in the work that we have named, of what Dr. TODD's solido-humoralism consists.

In the first place, certain diseases are separated in it from "*blood*-diseases," properly so called; those, for instance, which originate in some local taint of nutrition, affording examples wherein the solids are affected, such as cancer, and the whole class of malignant affections, which are disseminated by the blood only when they attack distant parts; and also diseases which arise from a deficiency of some element of the blood, as purpura, scurvy, and anemia. The true "blood-diseases" are those in which a morbid matter is generated by "an abnormal chemical action in the blood itself," and include the exanthemata, syphilis, glanders, the mixture of pus with blood (*pyohæmia* of M. PIORRY), dissection-wounds, poisons, diabetes, diseased kidneys,—all of which are named by Dr. TODD. These, in their essence, or in their progress, are so many true blood-diseases, and Dr. TODD's special object is to show that, in the same sense, gout and rheumatism are diseases of the blood.

The case of cancer above cited as a disease of the solids, disseminated through the fluids, and deposited in distant structures, demonstrates, in Dr. TODD's mind, the evil of exclusive opinions in pathology, and, as we ourselves read it, illustrates the distinction that this physician wishes to draw, as respects the particular subjects of which he treats,

between himself and those practitioners of the present day who have more frankly avowed themselves to be converts to a philosophical revival of the humoral doctrines of disease, or the application of the principles of science, as it now exists, to the materials in motion, or the fluids, of the living body, for the purpose of explaining the phenomena both of health and disease.

Now, we take it that the admission of the above extensive class of blood-diseases,—and also that diseases of the solids are disseminated in the fluids, and conveyed to distant parts by the blood,—brings Dr. TODD as completely within the pale of the humoral pathologists as is any individual of past or present times. Some portion of the existing race of practitioners,—educated, for the most part, to believe that the notion of any fundamental change occurring in the blood during life is in itself an absurdity, and taught to explain consecutive phenomena by the doctrine of *metastasis*, and coincident phenomena by that of nervous *sympathy*,—will, perhaps, regard Dr. TODD's opinions as heterodox in the extreme, and may reject them as unworthy of serious consideration. We have ourselves done something, however, to remove this inclination. And those who have kept pace with medical science as it has marched onward, will look more closely than the foregoing class to the merits of the humoral doctrines which Dr. TODD propounds. It is not our intention to enter into any general criticism of these, but the question, we apprehend, will arise, as respects the distinction which he has made. Cancer being regarded as a disease of the solids, wherein lies the cause of the local taint of nutrition in malignant diseases? Or, is the cachectic state which leads to the formation of cancerous tissue a disease of the solids? We suppose that if there still be a question at issue, this is it, and although, in the school of SCHWANN and SCHLEIDEN, by means of microscopical anatomy, we have attained a more precise knowledge of the cellular structure of the solid tissues than the contemporaries of ASCLEPIADES, or of BOERHAAVE, possessed, yet,—as believing that the normal or the abnormal form, and the state of aggregation, of the organic cells and fibrils, depend, originally, upon the purity and perfection of the material elaborated in the blood, and furnished to the interstitial tissue by the blood,—all are, alike, HUMORAL PATHOLOGISTS. Nor does Dr. TODD's definition of the essence of nutrition,—namely, that it consists in "an attraction between the "solids and the fluids, by which those ele- "ments of the latter which correspond in "chemical constitution with the former, are "drawn into or appropriated by them," "albumen going to the albuminous tissues, "fibrine to the fibrinous, and so on,"—remove the diseases cited from the category of humoral affections.

And here, again, we venture an opinion that the humoral pathologists of the present era will not be particularly satisfied with the definition given by Dr. TODD, of what he deems to be true blood-diseases.

If the blood be a vital fluid, as is stoutly contended for by most writers of reputation of the present day, the abnormal *vital* as well as *chemical* actions in the blood may be the proximate causes of diseases, and if Dr. TODD admits the vitality of the blood —vital and chemical power presiding over different series of phenomena—then (with the admission, also, that chemical disturbances in the blood form a primary and important part of many diseases) must come that of the blood being capable of vital resistance, and, hence, action and reaction in the blood itself. Febrile disturbance, preceded by depression and languor, is, in Dr. TODD's words, the most common character of blood-diseases, and the professed humoralist will say that action and reaction are manifested in the blood itself during the febrile paroxysm. If Dr. TODD refuse vitality to the blood, locating vital power in the solid tissues, or the more stationary elements (as would seem to follow from his admission of abnormal "chemical" changes only in his definition of blood-diseases), then we can but think that he dispenses altoge-

ther with the necessity of an independent vital power, in order to account for any of the phenomena in organised beings; for surely it is as easy to conceive cytoblasts and cells built up by the ordinary powers of nature, as the blood-corpuscle; and the fibrine of the blood exhibits at least as much evidence of vitality as do various albuminous tissues.

Throughout the reign of exclusive solidism gout was a stumbling-block, and there ever were observers abroad who could better comprehend its phenomena by referring to a *materies morbi* in the blood, according to the theory of the older physicians, than by the strained and unmeaning, or indefinite, hypotheses of atony of the extremities, irritation, metastasis, and sympathy, as understood by the moderns; so that Dr. Todd has by no means run a-head when he declares that there is a peculiar matter circulating in the blood of gouty subjects, which gives rise to the disease. But his views differ, in their detail, from those of his more recent contemporaries. Regarding the pabulum of the blood as occurring from a double source—the chyle and the effete particles of the tissues—the blood may be contaminated from both directions, but the peculiar gouty matter is derived from the stomach, or duodenum, an undue development of lactic acid being the primary disturbing agent, this product of unhealthy primary digestion, carried into the blood, there uniting with some element of the bile which has accumulated in consequence of a defective action of the liver. This gouty material most frequently coincides with lithic acid—gout with the lithic-acid diathesis,—but the former may be present without the latter.

This is Dr. Todd's hypothesis. It differs from that of Liebig and Dr. B. Jones, inasmuch as that the latter believe the *materies morbi* to have origin in the effete particles of the tissues,—to be owing to a deficient oxygenation thereof; and to be, invariably, the result of, or associated with, the lithic-acid diathesis, that diathesis depending, also, upon an imperfect oxygenation of the animal matter derived from the metamorphosis of the tissues. Imperfectly oxygenised particles act as foreign matter in the tissues which are the seat of gout, and produce gouty inflammation. Imperfectly oxygenised materials, separated from the blood, and becoming concrete in the kidneys, constitute gravel. Imperfect oxygenation is the cause of the acid in the gouty habit, as in the lithic habit. Oxidation being checked by the action of cold on the skin, occasions rheumatism. Hence the intimate connection between rheumatism, gout, and gravel. We must refer our readers to the respective works to determine which of these theories explains the greater number of facts, contenting ourselves for the present with the comfortable assurance that the treatment at once sanctioned and explained by them, respectively, is nearly identical. For the gout and gravel,—active exercise, promotion of the hepatic function, dilution and adjustment of the quantity of food to the amount of waste, and a diet chiefly animal.

Rheumatic fever, according to Dr. Todd, is also a blood-disease, being attributable to the presence of a particular morbid element in the blood, the complete elimination of which is necessary to the cure. The articular swelling is one of the results of the febrile cause, the morbid matter being attracted by some textures more than by others. Hence the term "rheumatic fever," is preferable to "acute articular rheumatism." The rheumatic diathesis may be produced by cold, imperfect nutrition, or defective assimilation, and a cessation, or an imperfection, of the "nutrient changes in the blood," producing an impoverished state, appears to be a characteristic feature both of the diathesis and the paroxysm. Disease of the heart may result from the rheumatic condition, without a paroxysm of rheumatic fever having previously occurred, and *by directing our remedies to the diathesis in young people, organic lesion of the heart may be prevented.* The latter important observation we remember not to have seen

before. But that the paroxysms of rheumatic fever may exist without the articular affection, and may pass off without any such affection occurring at all—another practical result of the author's observation—has been for a long period familiar to those who had closed not their eyes against all excepting the local expression of febrile states. Humoral pathologists have before remarked upon it as an important truth, and we may quote the following fact, as bearing closely upon the point, recorded in the late Dr. MOSELEY's work on Tropical Diseases: In the vicinity of Kingston, Jamaica, in the year 1779, during January, February, and March, there was not one shower of rain, and the sea-breezes were violent. The prevalent disease was rheumatism, and of many hundreds who were bled there was not a person of either sex, or of any colour, whose blood was not sizy.

Dr. TODD calls special attention to the resemblance that subsists between *rheumatic fever* and inflammation of the blood *from pus*, and we find the humoral doctrines of Dr. FERGUSSON on Puerperal Fever referred to, *pyohæmia* and *puerperal fever* having "frequently been set down as *rheumatism*," and this, as we learn, despite of "excellent dis-"crimination and acquirement and great ex-"perience." Glanders, also (another blood-disease), has been mistaken for rheumatic fever; and we are reminded that the virus of gonorrhœa becomes absorbed and affects the blood, producing rheumatism.

In the treatment of the rheumatic diathesis LIEBIG's views appear to be frequently acted upon by Dr. TODD:—"It cannot be expected "that a state of system which has, per-"haps, been inherited, or which has been "the result of a morbid element slowly and "gradually eliminated, from an early period "mingling itself with the elements of nutri-"tion in the molecular changes in the frame "• • • can be removed in a short time." Alkalies are recommended (to neutralise free lactic acid in the stomach), attention to the function of the skin, diluents, exercise, and iron (to promote healthy nutrition and a greater supply of oxygen), and a diet chiefly of animal food, blisters (to attract the morbid element from the articular textures), a warm climate, thermal springs, &c. On the treatment of rheumatic fever there are several excellent practical remarks in the work of Dr. TODD.

In thus inviting attention to this work, we may say, finally, that, as in the case of Dr. J. A. WILSON, the profession is debtor to Dr. TODD for his candour and courage in propounding his views. Certain we are that only a very few years since no physician of character and reputation would have had the temerity, in this country, to advance doctrines so opposed to the educational prejudices of his brethren in a certain circle—one pre-eminently narrow-minded and bigotted. On the present occasion our object has been to illustrate the general principles of the author rather than the special details, not undertaking, in fact, to pronounce judgment on either. Although Dr. TODD, in his particular theory, differs from LIEBIG, the spirit of LIEBIG, and of the chemical doctrines, pervades his book. The future may afford opportunity to examine and compare the respective merits of opposing views, or, which is more to be desired, new facts may be developed by which disputed points shall be set at rest. SYDENHAM was a martyr to the gout, and BOERHAAVE to rheumatism. Both were acute observers of nature and *humoral pathologists*. Organic chemistry must not rest at the simple fact of a *materies morbi*, but must trace the modifications which all the fluids undergo throughout the course of diseases, by which their nature may be ascertained, a proper method of cure will certainly be determined, and solidism, vitalism, humoralism (or, if Dr. TODD prefer it, *solido-humoralism*), will be absorbed in the more comprehensive signification that is attachable to the word PATHOLOGY.

IN acute mania the convolutions of the brain have a tendency to hypertrophy; in chronic mania to atrophy.—*Dr. Sutherland.*

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 27, 1843.

EDWARD STANLEY, F.R.S., President.

CASE OF MR. BRUNEL.

THE society was very much crowded on Tuesday night, in consequence of notice having been given that the case of Mr. Brunel would be brought before the members. We never recollect so numerous an assemblage. The business of the evening was commenced by the reading of a long paper on rickets, by Mr. Shaw, during which some impatience was expressed, whether at the tediousness of the communication or at the bad reading of the secretary, we cannot say.

It appeared from the paper relating to Mr. Brunel, that that gentleman, on the 3rd of April last, whilst engaged after dinner in amusing some children, placed half a sovereign in his mouth, and that the coin accidentally slipped behind the tongue, and passed into the larynx. He was immediately seized with a fit of coughing, and a severe sense of choking, which were quickly followed by vomiting, by which the contents of the stomach were ejected. He strained a little with efforts to vomit for two or three hours after, and coughed occasionally; he also suffered from a soreness at the upper part of the throat. With the exception of the latter symptom he remained quite well for the two following days, and did not suffer from any cough. On the 6th of April cough again came on, but he was so well on the 7th that he took a long journey, and was for two days and nights exposed to the cold. The cough now became worse, and he expectorated a little mucus tinged with blood, and also what appeared to be a little thin membrane. He now also felt pain in the right side of the chest, immediately over the right bronchus. On the 9th of April he took two aperient pills, one of which he vomited. He now placed himself in an inverted position over the back of a chair, and could distinctly feel that a loose substance changed its place in the air-passages coming up from the situation of the bronchus to the larynx. The pain in the chest ceased. A careful examination of the chest was made by Dr. Seth Thomson, but no abnormal sound whatever could be detected by the stethoscope. On the 17th Mr. Brunel took another journey, and the cough again returned. On the 18th Dr. Chambers, and afterwards Sir B. Brodie, were called in consultation. All thought that there was no doubt the coin had passed into the trachea, and that it was situated in the right bronchus. This opinion was confirmed by the effect of inverting the body over the chair, during which process the foreign body was distinctly felt by the patient to be passing up the trachea, and produced cough. The coin afterwards passed down into the chest. On the 20th, at a consultation held between Drs. Chambers and Seth Thompson and Sir B. Brodie and Mr. Stanley, the chest was again carefully examined, but no unusual sound could be detected. The other evidences, however, of a foreign body in the bronchus were so strong that it was decided to repeat the experiment of inverting the body; accordingly on the 25th he was placed on a machine which elevated the lower part of the body and depressed the upper portion, or *vice versâ*, at the will of the attendants. On the head of the patient being lowered no cough was at first produced, but on striking his back the cough became so violent, and the choking sensation so urgent, that it was deemed advisable not to proceed with it further without some alteration in the plan. At a consultation on the 27th it was determined to make an artificial opening in the trachea. This proceeding was adopted for a twofold reason; the first was to remove the coin by forceps, if possible, and if relief could not be so afforded, that the opening might act as a safety-valve in the prevention of suffocation on the body being again inverted. The opening was made, and the forceps attempted to be introduced, but so much irritation and convulsive coughing took place that the attempt was not persevered in. The forceps were again used on the 2nd of May, but with no better result. On the 3rd of May it was decided that nothing further could be done at that time, but when the patient had recovered from the effects of the previous proceedings it was determined to invert the body; this was accordingly done on the 13th. The body being inverted the back was struck two or three times, and the coin passed into the mouth, and struck against the incisor teeth; a little blood was passed at the same time, but there was no cough, and no convulsive distress, such as had taken place in the previous efforts to remove the coin. On the 28th of May the patient was able to leave town, and fourteen days afterwards the wound in the throat had nearly healed.

In some observations appended to the case, Sir B. BRODIE remarked that the difference of symptoms indicating the presence of a foreign body in the air-passages would depend upon the size and figure of the body in question. If the body were large it would become impacted in the trachea, and the respiration would be obstructed. If it were small it would probably descend into the right bronchus, or perhaps into one of its divisions and the breathing would be less obstructed. If it were light or not irregular in shape it might ascend to the glottis during a fit of coughing, and produce suffocation. If it were heavy it would not ascend during coughing, and there would be less fear of bad results. It

had been thought that in the present case the coin had passed into the right bronchus, because in some experiments on dead bodies it was found that a sixpence or a half-sovereign usually fell into this passage when introduced into the trachea. There was little inconvenience experienced by the patient when he was in the upright position, but he (Sir B. Brodie) believed that had the coin been allowed to remain, disease of the lungs, leading to a fatal result, would have followed. The failure of the stethoscope to afford any diagnostic assistance probably arose from the small space occupied by the coin; but even in more favourable circumstances it had been proved that we could not depend on this instrument. Mr. Hodgson, of Birmingham, had related a case to him in which a little boy, six years of age, had got a berry of the bladder-senna, as large as a pea, into the trachea. No sound whatever could be detected by the stethoscope. In seven days he died; the berry was found impacted in the trachea, about an inch below the cricoid cartilage. Mr. B. Phillips had informed him of another case, in which a little girl, two years of age, had died from the presence of a piece of the claw of a lobster in the trachea, on a line with the margin of the sternum, and in this case there were no stethoscopic signs of its presence whatever. The opening in the trachea in Mr. Brunel's case had fully answered one of the purposes for which it had been made, for none of the spasms or convulsion had followed the inversion of the body subsequently to the opening being made. The proceeding failed in the other object contemplated; but it must be remembered that the introduction of forceps into the trachea was always very difficult, for not only might the instrument slide over the surface of the coin, or pass by its sides, but there was a fear of grasping the bifurcation of the trachea, a thing very likely to occur, recollecting that the parts were out of sight and at some distance from the surface. Every attempt to introduce the forceps was accompanied by great spasm and irritation, and contrary to what might have been expected from the experiments of Magendie, this irritation was produced whether the forceps were passed up towards the larynx, or downwards towards the bronchus. The forceps were accordingly abandoned for these reasons, and the fear of injuring some of the most important parts situated in that neighbourhood.

Mr. Quain observed that the case was full of points of practical importance. It was curious to observe the different degrees of irritation which obtained in the trachea at different times. The foreign body at first produced no irritation, but the introduction of the forceps afterwards was followed by great irritation. Was this to be attributed to the supervention of some inflammation? He related the case of a man who wore a tube in the trachea for two years. He had attempted suicide by cutting his throat. Inflammation came on, and the epiglottis became adherent to the glottis. In Mr. Brunel's case, the reason why so little mischief ensued from the coin being so long in the air-passages, he thought, was owing to the kind of metal of which it was composed, the gold not being acted upon by the secretions. It was peculiar to this case that the foreign body could be moved up and down at the will of the patient. He would inquire whether the passage of the coin through the glottis was not accidental in this case? He thought it was, and that we could not calculate upon such a circumstance in another case. Convulsion and suffocation might ensue. In a similar instance might not the foreign body be stopped at the artificial opening in the trachea and be removed by a pair of short forceps? He agreed with the author of the paper as to the difficulty of manipulating when the body was low down in so sensitive a part as the air-passage.

Sir B. Brodie remarked that the difference in the irritation produced in the trachea by the coin and the forceps, depended on the fact of one of these bodies being stationary, whilst the other was moved about. If the forceps had been in one position or at one part no such irritation would have ensued. The difference in the irritation on inverting the body was so great before and after the opening in the trachea was made, that he could not help believing that that opening prevented the occurrence of convulsion and spasm. At all events, he was quite sure that no surgeon would be justified in inverting the body in a similar case without the previous performance of tracheotomy.

Mr. Arnott had no doubt that the opening in the trachea did prevent spasm. He had found when the larynx had been divided in an attempt at suicide, that the passage of a foreign body through it produced scarcely any irritation. He had thought in Mr. Brunel's case, from experiments on the dead body, that the coin could not be removed by the forceps. He thought, however, that it would have been ejected through a free opening in the trachea, a very common occurrence in these cases. The difficulty and interest in this case were dependent upon the weight of the body, the half-sovereign never being displaced except when the body was inverted. Had the foreign body been less weighty and more moveable, it would have been thrown out through a large opening in the trachea, during a fit of coughing.

Mr. Cæsar Hawkins insisted on the necessity of early operations in cases where foreign bodies were in the trachea. The longer the operation was delayed the more fear of irritation. He related two cases of

foreign bodies in the trachea in which he had performed tracheotomy; in one a piece of bone was removed by the forceps; in the other a piece of beef was coughed up through the opening. He referred also to a case at present under treatment in the country in which a tamarind-stone had become impacted in the wind pipe; tracheotomy was performed; there was little irritation from the passage of the forceps, but at present the foreign body remained in its position.

Mr. ARNOTT remarked that the sensibility of the trachea would vary very materially in the course of even a few minutes. On the first introduction of the canula and trocar into the trachea, in the operation of tracheotomy, much irritation ensued; this, however, soon subsided.

Dr. WEBSTER referred to a case recently published in one of the German journals in which a cherry-stone had become impacted in the trachea, but was removed by the introduction of the little finger through an artificial opening. On the two first occasions the introduction of the finger was followed by much irritation; on the third occasion the foreign body was ejected. He related another case in which a coin had remained in the trachea for four years, and had then destroyed the patient by producing phthisis.

Mr. CÆSAR HAWKINS believed many lives would be saved if an opening in the trachea were made early in cases where there was a foreign body in that passage.

Mr. CHARLES HAWKINS was unacquainted with any case where a coin had been coughed up from the air-passages through an opening in the trachea. When this did occur the foreign body was invariably of light weight, as a bean, pea, &c.

Mr. ASTON KEY spoke so low that we could scarcely hear him. We understood him to say that Dupuytren had related a case in his "Lecons Orales" of a man who had swallowed a half-franc piece which passed into the trachea. At first he was troubled with coughing, but subsequently this subsided. He lived ten years, and then died of phthisis, no attempt having been made to extract the coin. The coin was found imbedded in a large vomica in the lungs, and had no doubt produced the phthisis. In a case in which a sixpence had passed into the trachea, and there remained for twenty months, he had been at first inclined to operate, but finding the lung diseased, and that consequently the operation would endanger life, he had refrained. The disease of the lung was going on.

Dr. H. LEE suggested the enjoinment of the recumbent position in cases similar to Mr. Brunel's.

Sir B. BRODIE said that his patient had been in the recumbent position for fourteen days. The coin, however, did not move unless he inverted the body. Had the half-sovereign been allowed to remain in the bronchus disease of the lung would have ensued, as in the case related by Mr. Key. In the case he (Sir B. Brodie) had referred to as related by Mr. Hodgson, that surgeon had exclaimed, on hearing Mr. Brunel's case, that an opening in the trachea would have saved his patient. He (Sir B. Brodie) had not alluded fully to this case in his paper, because had he done so, he would have had, also, to allude to many others. It was, however, as follows:—Two children were playing; one was suddenly seized with coughing, and said she had swallowed a berry; a surgeon was twice called in, but always found the child quite well and playing about. Mr. Hodgson when called in also found the child playing and seemingly well. On tapping her back, however, a sense of suffocation came on. The child died of suffocation a few days after, not having suffered in the interim. The berry was found lodged in the glottis. An opening in the trachea would have saved its life.

Mr. PARTRIDGE and a VISITOR related a case lately admitted into St. Thomas's Hospital under the late Mr. Tyrrell, in which a boy coughed up a fourpenny-piece which had passed into the trachea. The coin was felt by the patient to move when his body was inverted; this proceeding, however, was attended by such fearful suffocative symptoms that it could not be persevered in.

Mr. KEY observed that the case just related was an instance in favour of an opening in the trachea in these accidents.

ROYAL MEDICO-BOTANICAL SOCIETY.

Thursday, June 22, 1843.

Earl STANHOPE, President.

A PAPER ON

THE DICTAMNUS CRETICUS,

by Mr. Bennett, was read.

The origanum dictamnus is a small, shrubby, branched plant, with square stalks, short, broad roundish leaves, covered with a thick white down, set in pairs at the joints, and purplish labiated flowers, in loose, scaly, drooping heads, or spikes. It is a perennial plant, a native of Candia; it flowers in July. The dittany of Crete was very famous among the ancients; it has been celebrated by Hippocrates, Aristotle, Theophrastus, Cicero, Dioscorides, Pliny, Galen, and others. Of the many properties attributed to it, its emmenagogue, alexipharmic, and vulnerary appear to be the chief. It is used in infusion, and the leaves are smoked; its juice is used externally. The leaves of the dittany, when in perfection, have an agreeable aromatic smell, and a hot, biting taste, and impart their virtues both to water and rectified spirit, tinging the former of a yellowish, the latter of a greenish colour. They contain a yellowish essential

oil, of a highly pungent aromatic taste and smell, which congeals in the cold into a mass having the appearance of camphor. Not more than half a drachm of the essential oil can be procured from a pound of the leaves.

THE BOTANICAL LABOURS OF MUTIS.

A sketch of the labours of the extraordinary botanist of New Grenada, termed by Linnæus, "Phytologorum Americanorum Princeps," from the pen of Humboldt, translated by Colonel Wright, late governor of the province of Loxa, was read. It was Mutis who first made known the true characters of the genus Cinchona, and who discovered the quinquina trees in the woods of Tena, near Santa Fé de Bogota, and also in the route from Honda to Villeta, and at the Mesa de Chinga. The cinchona tree is now to be found on the whole length of the Cordilleras, at an elevation of from seven hundred to fifteen hundred toises, upon an extent of about six hundred leagues from La Paez and Chuquisaca, to the mountains of Santa Martha and Merida. Mutis has the merit of being the first to distinguish the different species of cinchona, some of which, with downy petals, are much more active than others whose surface is smooth. He has proved that the active species, whose properties vary with the organic structure and form, should not be indiscriminately employed. Nor were the labours of Mutis confined to the genus Cinchona, most of the genera Alstonia, Vallea, Burmadesia, Escallonia, Manettia, Acæna, Brathys, Myroxylon, Befaria, Telipiogon, and many others, published in Linnæus's supplement, are due to the sagacity of the botanist of Santa Fé. Among the useful plants in medicine and commerce described by Mutis we must reckon the Phychotria emetica, or ipecacuanha of the river Magdalena; the Toluifera and the Myroxylon, which yield the balsams of Tolu and Peru; the Winteria Granadensis, and the Alstenia theaformis, which latter furnishes the tea of Bogota, the infusion of which cannot be too strongly recommended to travellers who remain any length of time exposed to the rain of the tropics. To Mutis, also, is owing the discovery of the Mikania Guaco, the most powerful antidote to the bite of venomous serpents; it is of the family of the Compositæ, and is known in its native country by the name of the Vejuco del Guaco. Zoology, the atmospheric currents, and mathematics, also engaged a portion of the attention of this extraordinary man. He never lost sight of the great problems of the *physique* of the universe. He travelled over the Cordilleras, barometer in hand. He determined the medium temperature of those table lands which appeared like islets in the middle of the aerial ocean. His taste for the physical sciences, and active curiosity directed to the development of the phenomena of organisation, and meteorology, maintained the empire of his mind to the last moment of his life. Of him Linnæus truly said, *Nomen immortale quod nulla ætas unquam delebit.*

OBSERVATIONS ON QUININE,

By Don Celestino Mutis; translated by Colonel Wright.

When bark was first introduced into practice, the gatherers and merchants supplied the real cinchona, but as the demand increased, and from the carelessness with which it had been previously collected, the source of the supply diminished, the barks of other species of cinchona which were only indirectly febrifuge, were substituted for, or mingled with, the genuine drug. The consequence was that it failed to produce the usual favourable result, and gave rise to much controversy, the physicians who used it not being aware of the fraud that had been practised. The Spanish government appointed Dr. Mutis to investigate the causes of the discrepancy of opinion and the difference of action of the barks of commerce. His first step was to seek out the cinchona trees in other localities than Loxa, and he afterwards found and classified seven distinct species, and four of these he selected as officinal, distinguishing each by the respective names of Naranjada (orange), Roja (red), Amarilla (yellow), and Blanca (white). Each of these can be distinguished from the other by its botanic characters. Dr. Mutis describes the Naranjada bark, which was the original cinchona, as possessing eminently balsamic, nervine, and antiperiodic qualities. It was succeeded in practice by the quina roja, which not being so markedly febrifuge as the preceding, required to be given in larger doses, and was not then always successful, but, on the contrary, frequently caused fatal results. The roja bark possesses the peculiar character of being eminently astringent, and has been found to be very serviceable in the treatment of gangrene; its virtues, therefore, are astringent, antiseptic, and indirectly antiperiodic. The quina amarilla was the next introduced; its bitterness somewhat resembles that of aloes, and it possesses, in addition to its febrifuge properties, a purgative action. The quina blanca, although it has not been much spoken of by writers, is no way inferior to the other three; it is a strong bitter and febrifuge.

On the table was placed a very large collection of recent medicinal plants.

In no case should leeches be applied to the penis itself; I have seen diffused suppuration and gangrene consequent upon the neglect of this precept.—*Ricord.*

NEWS OF THE WEEK.

The anonymous gentleman, termed in the newspapers "A Patriot," but generally believed to be Mr. H. Warburton, who had already presented one thousand pounds, through Lord Brougham, to advance the interests of education in University College London, has lately sent a third donation of five hundred pounds to the collegiate fund, with the chance that it will be applied to the endowment of a "Birkbeck scholarship," for the best proficient in a scientific knowledge of machinery. It is to be hoped that the increase of such endowments will not hinder instead of forwarding the objects that were proposed at the foundation of this school, as there is no instance yet on record of a college growing rich without becoming at the same time idle and corrupt.

On Wednesday last Mr. Hale Thomson, of Berners-street, was elected, by the unanimous voice of the governors, and without opposition, to fill the vacant office of surgeon in the Westminster Hospital, and Mr. C. G. Guthrie that of assistant-surgeon. The several candidates for surgical preferment who have been frequenting the hospital for years past with hopes of a successful termination to their assiduity on such an occasion as the present, would not risk a battle against the paternal influence that prevails in the appointment of assistant-surgeon. One of these, a Fellow of the Roy. Soc., and regarded among his friends as an accomplished surgeon, openly declined a contest "where the election had already been secured by Mr. Guthrie for his son," adding, comfortably for his conscientiousness as a gentleman, that "to oppose that son would by many persons be deemed very ungracious." Another candidate, who has for some years sought to create himself a good reputation as a general dealer in surgery, also declined, under "the especial circumstances" of the vacancy, to contest the appointment. The effect of small-pox upon Jack Bookworm's wife did not operate more miraculously on her admirers, than do the foul influences in hospital preferment at Westminster, on candidates.

The South West Branch of the Provincial Medical Association, at its recent annual meeting, reported an increase in the number of its members. Plymouth is appointed as the place of the next annual meeting, on which occasion Mr. De la Garde is to propose,—"That it be recommended to the members not to give any attestation or answer to inquiries made by assurance offices, because the so doing, in many cases, involves a communication of facts given in confidence, and without a consciousness of their importance, during professional intercourse; because it renders the medical man responsible; and because experience proves that no detriment results to those about to insure, as the offices give up the point when they cannot obtain an acquiescence." This, it will be seen, is a suggestion to refuse medical certificates altogether on behalf of persons proposing to insure in life-offices. Mr. De la Garde's proposal is a good one. Its general adoption would have the effect of making the offices *very particular* in selecting their own permanent medical referees. Appointments to such posts would no longer go by favour, but, by force of merit and powers of diagnosis. A more useful event, in its indirect operation on medical appointments in other institutions, could scarcely be suggested. Governors and directors might thus accidentally be brought to consider that there really may be "a difference" in the effect of a choice of medical officers—some from private influence and others for personal competence.

In reply to a question of Mr. Fox Maule, in the House of Commons, at the close of last week, Sir James Graham intimated that he hoped to lay on the table of the House before the termination of the year, a Bill for the regulation of the medical profession. So much the better. Of course no attempt will be made by the house to legislate on the subject in the present session of Parliament.—The conversation is thus reported in a morning paper of the 23rd inst.:—

"Mr. Fox Maule wished to ask the right honourable baronet at the head of the Home Department whether it was intended, on the part of the Government, to introduce any bill to vary the provisions of the Poor-law Act with respect to *Scotch* and *Irish* surgeons attending in prisons and unions?

"Sir James Graham said that a draft of a bill had been prepared by the governors of prisons in Scotland, which was now in his possession. He had taken the opinion of the law advisers of the Crown upon the subject, and he hoped in a few days to be able to introduce a bill on the subject. With regard to medical practitioners, members of Scotch universities not being allowed to be engaged in England under the Poor-law Amendment Act, he had already stated his opinion that it was a grievance, both with regard to them and Irish medical practitioners; but that arose from the Apothecaries' Act. The question of *the repeal of that Act* would open the whole subject relating to the practice of medicine. He was anxious to remove the grievances under which Irish and Scotch practitioners laboured; but he was not disposed to introduce any clause into the Poor-law Amendment Act to remedy it, because, as he stated, it involved, of necessity, the whole question of medical reform. He did not despair of laying a bill on the table of the house before the close of the session on the subject of the practice of medicine, and in that measure he would endeavour to remove the grievances which

had been alluded to by the right honourable gentleman."

Lord Grey has been ill, with what malady we know not, but his rank and character in the political world have induced his medical attendant to put forth a "bulletin"—(Those bulletins! What honour they do to the classical reputation of the profession)—of the condition of his lordship. The following announcement from the pen of Sir Stephen Hammick, M.D., issued on Monday last, is in every respect an elegant, lucid, and satisfactory medical document:—

"Lord Grey has *lost no ground* since yesterday.

"In some respects he is *better*; and

"*On the whole* his progress is satisfactory."

*** Since the above bulletin was in print another has been issued, written thus:—

"Tuesday. Lord Grey has had a tolerably good night, and *continues* on the whole *quite as well as yesterday*."

Bulletins, though never intended to be, always should be read in conjunction. How *well* was Lord Grey, "on the whole," *yesterday?*

At a recent meeting of subscribers to the proposed Paddington Hospital, it was resolved that although nearly 5000*l.* had been collected for the project, it would not be wise to commence building until the funds reached 15,000*l.*, and that if that amount was not ultimately obtained, the money subscribed should be returned to the donors, minus the expenses unavoidably incurred up to that time.

By a return this week made to the House of Commons, relative to receipts and expenditures on account of the *Metropolitan Commissioners in Lunacy*, from Aug. 1841 to Aug. 1842, it appears that 1993*l.* have been paid in fees to "legal and medical commissioners," 400*l.* for salary to the clerk and treasurer, and 138*l.* for the hire of carriages to pay visits in. The sum of 901*l.* had been received from proprietors of asylums and houses for licences to take patients.

Our attention has recently been called by the committee of the villa in the New-road, called The Sanatorium, to the claims of that building on public charity as a board-and-lodging house for sick persons who are too poor to be treated luxuriously at home and too proud to become inmates of the public hospitals; "those who," to use their own words, "to sickness add the exquisite sensibilities which a superior education creates, with limited means to obtain advice and assistance." A dinner in aid of the funds was to take place on the 29th inst., Lord Ashley in the chair. The committee urge that the Sanatorium is "*unique* in its character and principles." This is is precisely the thing that makes such an establishment a folly. For a million or two of people of "exquisite sensibilities" there are ten dressing-rooms in Devonshire-place House, which is, and must continue to be, unique. For the public are loath to pay the scheming doctors of Sanatoriums for curing in a genteel way persons "whose manners and morals, and delicate and nervous sensibility, would be excited to the quick" in a common hospital. The whole concern is a job, designed to push into practice the medical officers.

Mr. Acton has been elected surgeon to the Islington Dispensary, and Mr. Ware, Jun., surgeon to the Finsbury Dispensary.

Bethlem Hospital.—After a strong debate, on Monday last, it was carried by a majority that music should be introduced among the patients. Billiards, however, were not allowed, although cards and backgammon are permitted.

Mr. Churchill, our worthy publisher, has in the press an account of a visit to Graefenberg, recently undertaken, to investigate the merits of the cold water cure, by Sir C. Scudamore. It is perfectly right to investigate new propositions in the treatment of disease, but when we find the schemes of the investigators turned to such an account that in a couple of years one establishment gets into the advertising columns of the newspapers as a saleable means of income to the tune of four thousand pounds a-year, we may reasonably doubt whether medicine or money is the higher god of the experimenters in hydropathy. We have heard that Sir Charles will bring his own personal experience to bear on the question of its advantages, after having devoutly submitted himself, inside and out, for a good long period to the water process. What was the matter with him when he began, and how well he is now, we have not the honour to know, but this we observed at a casual meeting the other day, that hydropathy may happen to make you look shockingly *old*.

"Dr. Pereira on Food, one volume, price sixteen shillings, cloth," must excuse us (the doctor must) for saying that the "*sixteen shillings*, cloth," is a startling announcement. We grumble not on our account, for Messrs. Longman have been so good as to send us a presentation copy, but on behalf of the libraries. Jonathan's original little blue books, price one shilling, paper covers, force upon us the recollection that both affairs are compilations, differing, chiefly, on that account, in the price and amount of industry expended. The worthy doctor has become a laborious author; but in affixing prices to his later productions he should bear in mind the remark of Handel, when begged to hear a new overture from a novice,—"Oh, very goot!" said he, at the last bar; "Very goot, indeed! A leetle bit

from all de great masters!" Of course the publishers conscientiously charged accordingly. We say nothing, at present, of the merits of the work, which, however, at a cursory glance, seems to have been ably compiled.

Medical Nursery. — It is announced that the collegiate system is to be adopted in full force at St. Bartholomew's Hospital at the commencement, probably, of the ensuing medical session. With what useful view it is impossible to say. Apparently, it is nothing else than an attempt to emulate the old monastic regulations of Oxford and Cambridge, which are amongst the worst characteristics of those institutions, and which tend to place them altogether in the rear of the age. The plan set forth is just such as might have been expected from a short-sighted administration that rather looks to render the school noticeable and particular, on account of an oddity, than to make it eminent for the talent and industry with which medicine is taught in its wards and theatres. The proposal for a general dining-room for such students as choose to frequent it, instead of patronising boiled-beef rooms and mutton-chop taverns, is good; but to convert any parts of the hospital into a board and lodging-house, with a head warden and bull-dogs, and a constant "Does-your-mother-know-you're-out" sort of *surveillance* over the lodgers, is pre-eminently silly, and ought to be laughed at by all good students who can study of their own good will. Medical students seldom come to London without being then truly and fairly launched into the world, and if their own judgments are not able and ready, then, to guide them out of doors as well as in, they had better go back again for another year to mamma and the parson of the parish. We understand that as many as twenty cots have been got ready for tucking in young gentleman at night.

In the course of Dr. R. Lee's observations, sixty-six cases of arm and shoulder presentation occurred in the course of nearly twenty years. In many of these, turning was resorted to under very unfavourable circumstances, and, accordingly, laceration and inflammation of the uterus, the events most to be dreaded after turning, took place in some instances. Seven women (four in the practice of other accoucheurs) died from rupture of the uterus; and three from uterine inflammation. This announcement Dr. L. makes in a recent table in a contemporary journal.

A physician, named Wates, in announcing that he has recently given attention to the modes in which the action of poisons is exerted on the frame, states that he has observed facts which tend to show, 1st, that poisons do not act when applied either to the cut surfaces of the brain, the spinal cord, or the cerebro-spinal nerves; or when the inoculated part is connected with the trunk by *cerebro-spinal* nerves alone. But, 2ndly, that they do act, although a direct *cerebro-spinal* connection between the brain and the part inoculated may be destroyed by the division of the spinal cord, or the cerebro-spinal nerves.

Of 848 deaths within the mortality bills of the metropolis happening during the week ending June 10th ult., 234 resulted from diseases of the lungs, &c., 130 from diseases of the brain and nervous system, 67 from diseases of the stomach and organs of digestion, 58 from natural decay, 48 from typhus, 56 from hooping-cough, 33 from scarlatina, 39 from measles, and 10 from small-pox.

At the conclusion of the recent session of the Manchester School of Medicine, prizes were awarded to the following students for excelling in examinations in anatomy, physiology, and pathology (conducted by Mr. Turner); the practice of physic (conducted by Dr. Chaytor); midwifery, &c. (conducted by Mr. Heath); surgery (conducted by Mr. Ransome); and materia medica (conducted by Dr. Ainsworth):—First prizes to Mr. J. Taylor (of Salford), Mr. E. W. Mayne (of Bath), Mr. T. Willmott (of Cheshire), and Mr. J. G. Yates (of Pendleton). Second prizes to Mr. M. O. Larmuth (of Salford), three; and Mr. H. Anthony.

The French Council of the Hospitals for the Insane have withdrawn the restrictions respecting the admission of students at the Salpêtriere. We learn by the French journals that already one of the physicians, has begun a course of lectures on mental diseases at that institution. M. Baillarger has also resumed his clinical course. These changes, as well as the admission of pupils at St. Luke's, London, are partly attributable to Dr. Webster's pamphlet on the admission of pupils to Bethlem Hospital, of which he is an active governor, though in the latter wretchedly-administered institution no disposition has yet been shown to follow the example which has been set.

A member of that unfortunate class of society, the *medical assistants*, calls our attention to "one more illustration" of the advantageous consequences of expending hundreds of pounds on a medical education. It occurs in an advertisement in the *Times* paper of the 22nd. "As regards medical students," he observes, "who are all but *in* the poor-house after their complete draining by colleges, halls, and hospitals, the advertisement is highly interesting. It was evidently framed," he continues, "by some one who *also is striving to live*. It is dated from the neighbourhood of Old-street, St. Luke's, and states that the advertiser wants an *assistant* who would be 'content with a small salary,' would 'dispense and attend

to the retail,' and, by way of a wind-up, 'make himself *generally useful*.' Now, therefore, ye youthful disciples of Æsculapius, who, though living in unhappy poverty, at the same time sport golden rings and other ornaments appertaining to the modern dignity of a *profession*, proceed forthwith to learn the duties of the kitchen from some professor, and attend lectures on *Boots*, that you may all be qualified to become successful candidates as medical assistants." Our correspondent considers that not the least significant part of the advertisement is the closing announcement that the applicants must appear "personally" at the door of the advertiser, when, if they present an exterior somewhat the worse for wear, and seem hungry, the better their chance of the "small salary." The advertiser does not state whether the "assistant" is to eat in the kitchen with the other servants. Who is it that has brought the dignity of the pestle and mortar to this pass?

THE case of Mr. Brunel, Jun., was, as our readers may see, brought forward by Sir Benjamin Brodie, at the Medico-Chirurgical Society, on Tuesday last. Connected with this circumstance we take the opportunity of introducing to public notice what a correspondent terms, at the head of the following note to THE LANCET,—

CASUS SIMILIS DOMINO BRUNNELLO.

Dominus,—Anno nostri redemptionis, 1833, mensis Septembris. Filius deliciæ matris suæ, meo domui conservator pacis amplectibus afferebatur mater sequens, magno tribulatione os puero niger erat, luctante corpore casus sic ortus est, mater suæ filio caulem brassicam dedit (Scotice Kail Costock) ludere, morsus in trachea lapsus est, illico, visus est quomodo casum instaret trachea fore scidi, id factus est et puer jactu transverse genibus mihi repente, atque palmis tergo pulsat, morsus erupit, custodem urbem (vulgo) astæus incoctus hiante ore mirans constitit, mater magno lœtantæ cum puero profectus est Pater, pauper, sartor, Meybrum nomine, si placet vobis intelligere quanquam brassicam perutilissimi illi, certe suo nato non erat. Domine, Vale, JOANNES GRAY.

Upper George-street, Bryanstone-square.

We do not venture to translate this epistle, for our worthy correspondent steps so unsteadily amongst the concords, and contrives to make neuters agree with masculines, and first persons to govern thirds, in so unique a manner, that we might not Anglicise it with the requisite satisfaction to his scholarship.

THE readers of THE LANCET will recollect a case of diabetes mellitus detailed in the number for June 17th, p. 402, and which was cured by a routine of treatment, of which the substitution of maccaroni (*pain de gluten*) for ordinary bread formed a part. A case corroborative of the utility of this change is detailed in a recent number of the "Provincial Medical Journal." The patient at different periods of the treatment craved for bread, which was occasionally allowed, but its use was invariably followed by an exasperation of the morbid symptoms. Dr. Cowan, who reports this case, recommends in diabetes a diet of animal food, with cruciferous vegetables; all farinaceous articles to be strictly prohibited. Drink of beef-tea, lime water, diluted mineral acids, alum whey, or weak brandy and water; all to be taken tepid and in moderate quantity. Flannel clothing, moderate exercise, regular vapour baths with inunction afterwards, terebinthinate embrocations to the loins, opium, ammonia, and magnesia, in the early stages, and afterwards the free use of mineral and vegetable tonics and astringents.

ROYAL COLLEGE OF SURGEONS IN LONDON.

LIST of gentlemen admitted members on Friday, June 23, 1843:—Jabez Carr, Wm. N. Walker, Edward C. Hill, Charles Wm. Beckitt, Edward K. Parson, Henry Wm. Pain, George Sayle, Elijah Dodd, Wm. Smith.

CORRESPONDENTS.

Sir,—Can an individual possessing the licence of the Royal College of Physicians of London compel payment for attendance upon a medical case? N. N., Glasgow.—*** He cannot, unless he acted as a legally-qualified apothecary. He cannot recover as a physician.

Dr. A. Curtis, of Ohio, Cincinnati, who commences th leading article of his journal of Feb. 18th, last ("The Botanico-Medical Recorder"), with the following sentence:—"In the London LANCET for November last, a work which is considered by the faculty in this country (United States) to be the most scientific that the world produces," &c., and who requests our opinion on the claims referred to in that article, shall receive it in as early a number as we can find time to pronounce one on the subject.

It is not necessary to insert the communication of *M. R. C. S.*, because he only repeats the statements of Mr. Lloyd, and the explanation of Mr. E. Wilson, without throwing any new light on the subject, or adding to them anything but a censure of Mr. L. for the alleged mistake.

ERRATA.—In our last number, page 438, ten lines from the bottom, for "Bombastes," read *Bubastis* (or *Pasht*), the Diana of the Egyptians.

Dr. G. O. Rees is assistant-physician, not physician, at Guy's Hospital, as stated, in error, at page 390.